U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS** **Report format corresponds to Form PHMSA F 7000-1 (01-2001)**	**Original Report Date**	**March 08, 2004**
		No.	**20040061 - 3939**

PART A – GENERAL INFORMATION					
N	**Original Report**	**Y**	**Supplemental Report**	**Y**	**Final Report**
Last Revision Date			02/21/2006		
1. Operator Name and Address					
a. Operator's 5-digit Identification Number			2552		
b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if known)					
c. Name of Operator			COLONIAL PIPELINE CO		
d. Operator street address			1185 SANCTUARY PARKWAY, SUITE 100		
e. Operator address		City	ALPHARETTA		
		County or Parish	FULTON		
		State	GA		
		Zip code	30004-4738		
2. Time and date of the accident					
		Hour	04:30		
		Date of the accident	02/15/2004		
3. Location of accident					
a. Latitude			29 43 06		
Longitude			95 10 47		
b. City			PASADENA		
County or Parish			HARRIS		
c. State			TX		
Zip Code			77506		
d. Mile Post/Valve Station			00+0		
Survey Station No			0120		
4. Telephone Report					
NRC Report Number					
Date					
5. Losses (Estimated)					
Public/Community Losses reimbursed by operator					
Public/private property damage		$	0		
Cost of emergency response phase		$	0		
Cost of environmental remediation		$	0		
Other Costs		$	0		
Describe					
Operator Losses					
Value of product lost		$	0		
Value of operator property damage		$	0		
Other Costs		$	62,000		
Describe			RECOVERY AND REPAIR		
Total Costs		$	62,000		
6. Commodity Spilled					
Commodity spilled (yes/no)			Y		
a. Name of commodity spilled			GASOLINE		
b. Classification of commodity spilled			GASOLINE, DIESEL, FUEL OIL OR OTHER PETROLEUM PRODUCT WHICH IS A LIQUID AT AMBIENT CONDITIONS		
c. Estimated amount of commodity involved					
Unit of Measure			BARRELS		
Amount Spilled			2.00		
Amount Recovered			2.00		
CAUSES FOR SMALL SPILLS			EXCAVATION DAMAGE		
PART B – PREPARER AND AUTHORIZED SIGNATURE					

Preparer's Name		STEPHEN E. GILLIAM	
Area Code and Telephone Number		6787622314	
Preparer's E-mail Address		SGILLIAM@COLPIPE.COM	
Area Code and Facsimile Number		6787622464	
PART C – ORIGIN OF THE ACCIDENT			
1. Additional location information			
a. Line segment name or ID		LINE 1	
b. Accident on Federal Land other than Outer Continental Shelf		NO	
c. Is pipeline Interstate		Y	
Offshore		N	
d. Area			
Block #			
State			
Outer Continental Shelf			
2. Location of system involved			
Operator's Property		YES	
Pipeline Right of Way		N	
High Consequence Area (HCA)		N	
Describe HCA			
3. Part of system involved in accident		ONSHORE PUMP/METER STATION EQUIPMENT AND PIPING	
Other (specify)			
If failure occurred on Pipeline, complete items a-g			
a. Leak or Rupture			
Type of Leak			
- Puncture, diameter *(inches)*			
Type of Rupture			
- Tear/Crack, length *(inches)*			
- Propagation Length, total, both sides *(feet)*			
Other (specify)			
b. Type of block valve used for isolation immediate section			
Upstream			
Manual		NO	
Automatic		NO	
Remote Control		NO	
Check Valve		NO	
Downstream			
Manual		NO	
Automatic		NO	
Remote Control		NO	
Check Valve		NO	
c. Length of segment isolated (ft)			
d. Distance between valves (ft)			
e. Is segment configured for internal inspection tools?			
f. Had there been an in-line inspection device run at the point of failure?			
g. If Yes, type of device run			
High Resolution Magnetic Flux tool	NO	Year run	
Low Resolution Magnetic Flux tool	NO	Year run	
UT tool	NO	Year run	
Geometry tool	NO	Year run	
Caliper tool	NO	Year run	
Crack tool	NO	Year run	
Hard Spot tool	NO	Year run	
Other tool	NO	Year run	
4. Failure occurred on		BODY OF PIPE	
Other (specify)			
Year the component that failed was installed		1980	

5. Maximum operating pressure (MOP)		
a. Estimated pressure at point and time of accident (PSIG)	100	
b. MOP at time of accident (PSIG)	150.00	
c. Did an over pressurization occur relating to the accident?	N	
PART D – MATERIAL SPECIFICATION		
1. Nominal pipe size (NPS) (inches)	36	
2. Wall thickness (inches)	.38	
3. Specification	X60	
SMYS	60000	
4. Seam type	DSAW	
5. Valve type		
6. Manufactured by	KAISER	
in year	1980	
PART E - ENVIRONMENT		
1. Area of accident	UNDER GROUND	
Other (specify)		
2. Depth of cover (inches)	18	
PART F - CONSEQUENCES		
1. Consequences	**Fatalities**	**Injuries**
a. Number of operator employees	0	0
Contractor employees working for operator	0	0
General public	0	0
Totals	0	0
b. Was pipeline/segment shutdown due to leak?	Y	
If Yes, how long? Days	1	
Hours	12	
Minutes	0	
c. Product ignited	Gas did not Ignite	
d. Explosion	NO EXPLOSION	
e. Evacuation *(general public only)*	N	
Number of people		
Reason for Evacuation		
f. Elapsed time until area was made safe		
Hours		
Minutes		
2. Environmental Impact		
a. Wildlife Impact		
Fish/aquatic	N	
Birds	N	
Terrestrial	N	
b. Soil Contamination	Y	
If Yes, estimated number of cubic yards	50	
c. Long term impact assessment performed	N	
d. Anticipated remediation	N	
If Yes, check all that apply		
Surface Water	N	
Groundwater	N	
Soil	N	
Vegetation	N	
Wildlife	N	
e. Water Contamination	N	
Amount in water (barrels)		
Ocean/Seawater		
Surface		
Groundwater		
Drinking water		
Drinking water source		
PART G – LEAK DETECTION INFORMATION		
1. Computer based leak detection capability in place?	N	
2. Was the release initially detected by?	LOCAL OPERATING PERSONNEL,	

	PROCEDURES OR EQUIPMENT
Other (specify)	
3. Estimated leak duration Days	1
Hours	0
PART H – APPARENT CAUSE	
H1 – CORROSION	
1. External Corrosion	
2. Internal Corrosion	
Complete items a-e where applicable	
a. Pipe Coating	
b. Visual Examination	
Other (specify)	
c. Cause of Corrosion	
Other (specify)	
d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?	
Year Protection Started	
e. Was pipe previously damaged in the area of corrosion?	
Estimated time prior to accident Years	
Months	
H2 – NATURAL FORCES	
3. Earth Movement	
Description	
Other (specify)	
4. Lightning	
5. Heavy Rains/Floods	
Description	
Other (specify)	
6. Temperature	
Description	
Other (specify)	
7. High Winds	
H3 – EXCAVATION DAMAGE	
8. Operator Excavation Damage (including their contractors / Not Third Party)	
9. Third Party	Yes
a. Excavator group	EXCAVATOR OTHER THAN OPERATOR/SUBCONTRACTOR
b. Type	OTHER
Other (specify)	
c. Excavation was	OPEN TRENCH
d. Excavation was ongoing activity (Month or longer)	N
If Yes, Date of last contact	
e. Did operator get prior notification of excavation activity?	N
If Yes; Date received	null
Notification received from	
f. Was pipeline marked?	Y
i. Temporary markings	FLAGS
ii. Permanent markings	Y
iii. Marks were	ACCURATE
iv. Were marks made within required time?	Y
H4 – OTHER OUTSIDE FORCE DAMAGE	
10. Fire/Explosion as primary cause of failure	
Fire/Explosion cause	
11. Car, truck or other vehicle not relating to excavation activity damaging pipe	
12. Rupture of Previously Damaged Pipe	
13. Vandalism	
H5 – MATERIAL AND/OR WELD FAILURES	

Material	
14. Body of Pipe	
Description	
Other (specify)	
15. Component	
Description	
Other (specify)	
16. Joint	
Description	
Other (specify)	
Weld	
17. Butt	
Description	
Other (specify)	
18. Fillet	
Description	
Other (specify)	
19. Pipe Seam	
Description	
Other (specify)	
Complete a-g if you indicate any cause in part H5	
a. Type of failure	
Construction Defect	NO DATA
Description	
Material Defect	NO DATA
b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site?	
c. Was part which leaked pressure tested before accident occurred?	
d. Date of test	
Year	
Month	
Day	
e. Test medium	
Other (specify)	
f. Time held at test pressure (hr)	
g. Estimated test pressure at point of incident (PSIG)	
H6 – EQUIPMENT	
20. Malfunction of Control/Relief Equipment	
Description	
Other (specify)	
21. Threads Stripped, Broken Pipe Coupling	
Description	
Other (specify)	
22. Seal Failure	
Description	
Other (specify)	
H7 – INCORRECT OPERATION	
23. Incorrect Operation	
a. Type	
Other (specify)	
b. Number of employees involved who failed a post-accident test	
Drug test	
Alcohol test	
H8 - OTHER	
24. Miscellaneous	
Describe	
25. Unknown	
Describe	
PART I – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT	
UPON ARRIVAL FOR SHIFT CHANGE AT HOUSTON STATION, AN OPERATOR SMELLED GASOLINE	

VAPORS IN THE STATION MANIFOLD AREA. SHE NOTIFIED THE NIGHT SHIFT AND CONTROL CENTER. THE PIPELINE WAS IMMEDIATELY SHUT DOWN. THE OPERATIONS MANAGER ARRIVED AND DETERMINED THAT CONTRACT HELP WAS NEEDED TO DETERMINE THE SOURCE OF PRODUCT RELEASE. UPON ARRIVAL OF EQUIPMENT AND MANPOWER, EXCAVATION BEGAN AND THE SOURCE OF THE LEAK WAS FOUD TO BE A CRACK NEAR THE TOE OF THE WELD WHERE A 36" SHIPPER LINE CONNECTED INTO THE MAIN 40" GASOLINE HEADER WITHIN HOUSTON STATION. THE AREA WAS ISOLATED AND DRAINED UP TO INITIATE THE REPAIR PLAN. A TEE-LIKE REPAIR SLEEVE WAS FABRICATED OUT OF 36" & 40" SLEEVE MATERIAL AND WELDED TO THE HEADER.

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS** **Report format corresponds to Form PHMSA F 7000-1 (01-2001)**	**Original Report Date** **No.**	**September 15, 2006** **20060270 - 5260**

PART A – GENERAL INFORMATION					
N	**Original Report**	**Y**	**Supplemental Report**	**Y**	**Final Report**
Last Revision Date			02/21/2007		
1. Operator Name and Address					
a. Operator's 5-digit Identification Number			2552		
b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if known)					
c. Name of Operator			COLONIAL PIPELINE COMPANY		
d. Operator street address			1185 SANCTUARY PARKWAY, SUITE 100		
e. Operator address		City	ALPHARETTA		
		County or Parish	FULTON		
		State	GA		
		Zip code	30004		
2. Time and date of the accident					
		Hour	08:40		
		Date of the accident	08/17/2006		
3. Location of accident					
a. Latitude			36.0517		
Longitude			-86.3837		
b. City			NASHVILLE		
County or Parish			DAVIDSON		
c. State			TN		
Zip Code					
d. Mile Post/Valve Station					
Survey Station No			618975		
4. Telephone Report					
NRC Report Number			808160		
Date			08/17/2006		
5. Losses (Estimated)					
Public/Community Losses reimbursed by operator					
Public/private property damage		$	0		
Cost of emergency response phase		$	150,000		
Cost of environmental remediation		$	650,000		
Other Costs		$	0		
Describe					
Operator Losses					
Value of product lost		$	12,000		
Value of operator property damage		$	50,000		
Other Costs		$	0		
Describe					
Total Costs		$	862,000		
6. Commodity Spilled					
Commodity spilled (yes/no)			Y		
a. Name of commodity spilled			DIESEL		
b. Classification of commodity spilled			GASOLINE, DIESEL, FUEL OIL OR OTHER PETROLEUM PRODUCT WHICH IS A LIQUID AT AMBIENT CONDITIONS		
c. Estimated amount of commodity involved					
Unit of Measure			BARRELS		
Amount Spilled			113.00		
Amount Recovered			113.00		
CAUSES FOR SMALL SPILLS			NO DATA		
PART B – PREPARER AND AUTHORIZED SIGNATURE					

Preparer's Name		A. MAC TAYLOR	
Area Code and Telephone Number		6787622872	
Preparer's E-mail Address		ATAYLOR@COLPIPE.COM	
Area Code and Facsimile Number		6787622464	
PART C – ORIGIN OF THE ACCIDENT			
1. Additional location information			
a. Line segment name or ID		LINE 20	
b. Accident on Federal Land other than Outer Continental Shelf		NO	
c. Is pipeline Interstate		Y	
Offshore		N	
d. Area			
Block #			
State			
Outer Continental Shelf			
2. Location of system involved			
Operator's Property		NO	
Pipeline Right of Way		Y	
High Consequence Area (HCA)		Y	
Describe HCA		HIGH POPULATION AREA AND USA	
3. Part of system involved in accident		ONSHORE PIPELINE, INCLUDING VALVE SITES	
Other (specify)			
If failure occurred on Pipeline, complete items a-g			
a. Leak or Rupture		LEAK	
Type of Leak		PUNCTURE	
- Puncture, diameter *(inches)*		8	
Type of Rupture			
- Tear/Crack, length *(inches)*			
- Propagation Length, total, both sides *(feet)*			
Other (specify)			
b. Type of block valve used for isolation immediate section			
Upstream			
Manual		YES	
Automatic		NO	
Remote Control		NO	
Check Valve		NO	
Downstream			
Manual		YES	
Automatic		NO	
Remote Control		NO	
Check Valve		NO	
c. Length of segment isolated (ft)		60226	
d. Distance between valves (ft)		60226	
e. Is segment configured for internal inspection tools?		YES	
f. Had there been an in-line inspection device run at the point of failure?		YES	
g. If Yes, type of device run			
High Resolution Magnetic Flux tool	YES	Year run	2006
Low Resolution Magnetic Flux tool	NO	Year run	
UT tool	NO	Year run	
Geometry tool	YES	Year run	2006
Caliper tool	NO	Year run	
Crack tool	NO	Year run	
Hard Spot tool	NO	Year run	
Other tool	NO	Year run	
4. Failure occurred on		BODY OF PIPE	
Other (specify)			
Year the component that failed was installed		1963	
5. Maximum operating pressure (MOP)			

a. Estimated pressure at point and time of accident (PSIG)	350	
b. MOP at time of accident (PSIG)	1220.00	
c. Did an over pressurization occur relating to the accident?	N	
PART D – MATERIAL SPECIFICATION		
1. Nominal pipe size (NPS) (inches)	8.63	
2. Wall thickness (inches)	.19	
3. Specification	API 5L	
SMYS	42000	
4. Seam type	ERW	
5. Valve type		
6. Manufactured by	JONES & LAUGHLIN	
in year	1963	
PART E - ENVIRONMENT		
1. Area of accident	UNDER GROUND	
Other (specify)		
2. Depth of cover (inches)	48	
PART F - CONSEQUENCES		
1. Consequences	**Fatalities**	**Injuries**
a. Number of operator employees	0	0
Contractor employees working for operator	0	0
General public	0	0
Totals	0	0
b. Was pipeline/segment shutdown due to leak?	Y	
If Yes, how long? Days	0	
Hours	21	
Minutes	0	
c. Product ignited	Gas did not Ignite	
d. Explosion	NO EXPLOSION	
e. Evacuation *(general public only)*	N	
Number of people		
Reason for Evacuation		
f. Elapsed time until area was made safe		
Hours		
Minutes		
2. Environmental Impact		
a. Wildlife Impact		
Fish/aquatic	N	
Birds	N	
Terrestrial	N	
b. Soil Contamination	Y	
If Yes, estimated number of cubic yards	8000	
c. Long term impact assessment performed	Y	
d. Anticipated remediation	Y	
If Yes, check all that apply		
Surface Water	N	
Groundwater	Y	
Soil	Y	
Vegetation	N	
Wildlife	N	
e. Water Contamination	Y	
Amount in water (barrels)	35	
Ocean/Seawater	N	
Surface	N	
Groundwater	Y	
Drinking water	N	
Drinking water source		
PART G – LEAK DETECTION INFORMATION		
1. Computer based leak detection capability in place?	N	
2. Was the release initially detected by?	A THIRD PARTY	
Other (specify)		

3. Estimated leak duration Days	0
Hours	4
PART H – APPARENT CAUSE	
H1 – CORROSION	
1. External Corrosion	
2. Internal Corrosion	
Complete items a-e where applicable	
a. Pipe Coating	
b. Visual Examination	
Other (specify)	
c. Cause of Corrosion	
Other (specify)	
d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?	
Year Protection Started	
e. Was pipe previously damaged in the area of corrosion?	
Estimated time prior to accident Years	
Months	
H2 – NATURAL FORCES	
3. Earth Movement	
Description	
Other (specify)	
4. Lightning	
5. Heavy Rains/Floods	
Description	
Other (specify)	
6. Temperature	
Description	
Other (specify)	
7. High Winds	
H3 – EXCAVATION DAMAGE	
8. Operator Excavation Damage (including their contractors / Not Third Party)	
9. Third Party	Yes
a. Excavator group	GENERAL PUBLIC
b. Type	PHONE/CABLE
Other (specify)	
c. Excavation was	OPEN TRENCH
d. Excavation was ongoing activity (Month or longer)	Y
If Yes, Date of last contact	
e. Did operator get prior notification of excavation activity?	N
If Yes; Date received	null
Notification received from	
f. Was pipeline marked?	Y
i. Temporary markings	
ii. Permanent markings	Y
iii. Marks were	ACCURATE
iv. Were marks made within required time?	
H4 – OTHER OUTSIDE FORCE DAMAGE	
10. Fire/Explosion as primary cause of failure	
Fire/Explosion cause	
11. Car, truck or other vehicle not relating to excavation activity damaging pipe	
12. Rupture of Previously Damaged Pipe	
13. Vandalism	
H5 – MATERIAL AND/OR WELD FAILURES	
Material	
14. Body of Pipe	
Description	

Other (specify)	
15. Component	
Description	
Other (specify)	
16. Joint	
Description	
Other (specify)	
Weld	
17. Butt	
Description	
Other (specify)	
18. Fillet	
Description	
Other (specify)	
19. Pipe Seam	
Description	
Other (specify)	
Complete a-g if you indicate any cause in part H5	
a. Type of failure	
Construction Defect	NO DATA
Description	
Material Defect	NO DATA
b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site?	
c. Was part which leaked pressure tested before accident occurred?	
d. Date of test	
Year	
Month	
Day	
e. Test medium	
Other (specify)	
f. Time held at test pressure (hr)	
g. Estimated test pressure at point of incident (PSIG)	
H6 – EQUIPMENT	
20. Malfunction of Control/Relief Equipment	
Description	
Other (specify)	
21. Threads Stripped, Broken Pipe Coupling	
Description	
Other (specify)	
22. Seal Failure	
Description	
Other (specify)	
H7 – INCORRECT OPERATION	
23. Incorrect Operation	
a. Type	
Other (specify)	
b. Number of employees involved who failed a post-accident test	
Drug test	
Alcohol test	
H8 - OTHER	
24. Miscellaneous	
Describe	
25. Unknown	
Describe	
PART I – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT	
NEGLIGIBLE AMOUNTS OF PRODUCT WERE LOST TO EVAPORATION, DISSOLVED IN GROUNDWATER, OR REMAIN WITHIN SITE SOILS. THIS ASSUMPTION IS BASED UPON THE LOW VOLATILITY AND SOLUBILITY OF FUEL OIL AND THE RESULTS OF SITE INVESTIGATION ACTIVITIES. ON AUGUST 17, 2006, AT 08:45 CDT THE CONTROL CENTER RECEIVED A CALL	

FROM A CONTRACTOR IN NASHVILLE SAYING HE HAD HIT THE PIPELINE WITH A BULLDOZER NEAR THE INTERSECTION OF THE LINE AND NASHBORO BLVD IN METRO NASHVILLE. THE CONTRACTOR REPORTED THAT THE LINE WAS LEAKING DIESEL FUEL. BOTH LINES 19 AND 20 WERE IMMEDIATELY SHUT DOWN AND AS MUCH PRESSURE AS POSSIBLE WAS REMOVED FROM LINES INTO NASHVILLE DELIVERY. AT 08:50, THE CONTROL CENTER LEADER INFORMED THE DISTRICT LEADER WHO SUBSEQUENTLY NOTIFIED THE OPERATIONS MANAGER. AT 09:03, OPERATIONS MANAGER SENT OUT 2 NASHVILLE SENIOR OPERATORS AND 2 TECHNICIANS TO INVESTIGATE. THE ENVIRONMENTAL MANAGER MADE NOTIFICATION TO NASHVILLE EMERGENCY MANAGEMENT AND DISPATCHED LOCAL OSROS TO THE SITE TO ASSIST IN RESPONSE AND CLEAN UP ACTIVITIES. AT 09:26, SENIOR OPERATOR ARRIVED ON SITE AND CONFIRMED THAT DIESEL FUEL WAS LEAKING FROM LINE 20. THE BULLDOZER OPERATOR THAT HAD STRUCK THE LINE WAS BUILDING A DIRT BERM TO CONTAIN THE PRODUCT. THE SENIOR OPERATOR DIRECTED THE OPERATOR TO BUILD AN ADDITIONAL BERM TO PREVENT THE PRODUCT FROM ENTERING A STORM DRAIN THAT WAS LOCATED APPROXIMATELY 200 FEET DOWNGRADIENT OF THE RELEASE POINT. THE UPSTREAM LINE 20 BLOCK VALVE AT LAKE ROAD WAS CLOSED TO MINIMIZE THE DRAIN-UP AT THE POINT OF RELEASE. TDEC AND NASHVILLE EMERGENCY MANAGEMENT ARRIVED AT THE LEAK SITE AROUND 09:30. AT 10:30, EMERGENCY RESPONSE CONTRACTORS ARRIVED AND BEGAN TO RECOVER PRODUCT THAT HAD POOLED BEHIND THE CONTAINMENT BERMS WITH VACUUM TRUCKS. LINE 20 WAS EXCAVATED AND FUEL OIL WAS OBSERVED TO BE DRAINING OUT OF A 1-INCH BY 4-INCH HOLE IN THE PIPELINE. A VACUUM TRUCK WAS UTILIZED TO CONTAIN AND RECOVER THE REMAINING DRAIN-UP FROM THE LEAK, WHICH CONTINUED UNTIL APPROXIMATELY 12:30. RECONNAISANCE WAS CONDUCTED IN THE LEAK SITE VICINITY TO IDENTIFIY ALL POTENTIAL PRODUCT RESURGENCE POINTS IN THE EVENT OF PRODUCT MIGRATION THROUGH THE SUBSURFACE. EMERGENCY RESPONSE CONTRACTORS DEPLOYED BOOM AT SIX LOCATIONS WITHIN A NEARBY CREEK AND PLUGGED THE STORM SEWER AS A PRECAUTION. TO DATE, NO PRODUCT HAS MIGRATED TO THE CREEK, STORM DRAIN, OR SANITARY SEWER. A PRODUCT RECOVERY TRENCH WAS INSTALLED ON THE PIPELINE RIGHT-OF-WAY AT THE BASE OF THE HILL ADJACENT TO NASHBORO BLVD. APPROXIMATELY 1,500 GALLONS OF PRODUCT WERE RECOVERED FROM THE POOLED PRODUCT LOCATIONS BEHIND THE CONTAINMENT BERMS AND FROM THE RECOVERY TRENCH. THE INITIAL ESTIMATED RELEASE VOLUME OF 200 BARRELS IS BASED UPON LINE FILL CALCULATIONS AND DRAIN-UP ESTIMATES. BASED UPON A PRELIMINARY ASSESSMENT CONDUCTED AT THE LEAK SITE, IT APPEARS THAT IMPACTS FROM THE RELEASE ARE CONFINED TO AN AREA MEASURING APPROXIMATELY 200 FEET BY 200 FEET ALONG THE PIPELINE RIGHT OF WAY SOUTH OF NASHBORO BLVD. EXCAVATION EFFORTS ARE UNDERWAY TO REMOVE AN ESTMATED 10,000 TO 12,000 TONS OF SOILS IMPACTED BY THE RELEASE. EXCAVATION OF THE IMPACTED SOILS IS EXPECTED TO MINIMIZE GROUNDWATER IMPACTS AND SHOULD ALLOW FOR SITE CLOSURE FROM THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION. THE MAJORITY OF PRODUT RECOVERED FROM THE ENVIRONMENT WILL BE FROM THE EXCAVATION OF IMPACTED SOILS. THE FINAL VOLUME OF RECOVERED PRODUCT WILL BE DETERMINED UPON COMPLETION OF SOIL EXCAVATION ACTIVITIES. SITE REMEDIATION ACTIVITIES HAVE BEEN COMPLETED. APPROXIMATELY 9,916 TONS OF IMPACTED SOIL WERE EXCAVATED AND TRANSPORTED TO A LOCAL LANDFILL FOR DISPOSAL. CLEAN-UP GOALS WERE MET AND A CLOSURE REQUEST WILL BE SUBMITTED TO TDEC IN JANUARY 2007. NO ADDITIONAL ACTIONS ARE EXPECTED AT THE SITE. AN UPDATED SPILL VOLUME ESTIMATE OF 113 BARRELS HAS BEEN CALCULATED BASED UPON THE COMBINED TOTAL OF THE AMOUNT OF LIQUID PRODUCT RECOVERED AT THE SITE (35 BARRELS) AND THE ESTIMATED VOLUME OF PRODUCT ABSORBED WITHIN IMPACTED SOILS (78 BARRELS) AT THE SITE. THE SPILL VOLUME ESTIMATE ASSUMES THAT ALL OF THE RELEASED PRODUCT WAS RECOVERED EITHER IN LIQUID PHASE BY VACUUM TRUCK OR IN THE ABSORBED PHASE THROUGH SOIL EXCAVATION AND THAT ONLY

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS** **Report format corresponds to Form PHMSA F 7000-1 (01-2001)**	**Original Report Date** **No.**	**October 21, 2008** **20080318 - 9552**

PART A – GENERAL INFORMATION					
N	**Original Report**	**Y**	**Supplemental Report**	**Y**	**Final Report**
Last Revision Date			10/07/2009		
1. Operator Name and Address					
a. Operator's 5-digit Identification Number			2552		
b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if known)					
c. Name of Operator			COLONIAL PIPELINE CO		
d. Operator street address			1185 SANCTUARY PARKWAY, SUITE 100		
e. Operator address		City	ALPHARETTA		
		County or Parish	FULTON		
		State	GA		
		Zip code	30009		
2. Time and date of the accident					
		Hour	11:35		
		Date of the accident	10/03/2008		
3. Location of accident					
a. Latitude			40.21833		
Longitude			-74.76806		
b. City			HAMILTON		
County or Parish			MERCER		
c. State			NJ		
Zip Code			18691		
d. Mile Post/Valve Station					
Survey Station No			2849+70		
4. Telephone Report					
NRC Report Number			886063		
Date			10/03/2008		
5. Losses (Estimated)					
Public/Community Losses reimbursed by operator					
Public/private property damage		$	0		
Cost of emergency response phase		$	228,037		
Cost of environmental remediation		$	358,266		
Other Costs		$	0		
Describe					
Operator Losses					
Value of product lost		$	22,300		
Value of operator property damage		$	540,345		
Other Costs		$	0		
Describe					
Total Costs		$	1,148,948		
6. Commodity Spilled					
Commodity spilled (yes/no)			Y		
a. Name of commodity spilled			DIESEL FUEL		
b. Classification of commodity spilled			GASOLINE, DIESEL, FUEL OIL OR OTHER PETROLEUM PRODUCT WHICH IS A LIQUID AT AMBIENT CONDITIONS		
c. Estimated amount of commodity involved					
Unit of Measure			BARRELS		
Amount Spilled			835.00		
Amount Recovered			833.00		
CAUSES FOR SMALL SPILLS			NO DATA		
PART B – PREPARER AND AUTHORIZED SIGNATURE					

Preparer's Name		A. MAC TAYLOR	
Area Code and Telephone Number		6787622872	
Preparer's E-mail Address		ATAYLORJ@COLPIPE.COM	
Area Code and Facsimile Number		6787622464	
PART C – ORIGIN OF THE ACCIDENT			
1. Additional location information			
a. Line segment name or ID		LINE 3	
b. Accident on Federal Land other than Outer Continental Shelf		NO	
c. Is pipeline Interstate		Y	
Offshore		N	
d. Area			
Block #			
State			
Outer Continental Shelf			
2. Location of system involved			
Operator's Property		NO	
Pipeline Right of Way		Y	
High Consequence Area (HCA)		Y	
Describe HCA		HIGH POPULATION AREA	
3. Part of system involved in accident		ONSHORE PIPELINE, INCLUDING VALVE SITES	
Other (specify)			
If failure occurred on Pipeline, complete items a-g			
a. Leak or Rupture		LEAK	
Type of Leak		PUNCTURE	
- Puncture, diameter *(inches)*		2	
Type of Rupture			
- Tear/Crack, length *(inches)*			
- Propagation Length, total, both sides *(feet)*			
Other (specify)			
b. Type of block valve used for isolation immediate section			
Upstream			
Manual		NO	
Automatic		NO	
Remote Control		YES	
Check Valve		NO	
Downstream			
Manual		YES	
Automatic		NO	
Remote Control		NO	
Check Valve		NO	
c. Length of segment isolated (ft)		145834	
d. Distance between valves (ft)		145834	
e. Is segment configured for internal inspection tools?		YES	
f. Had there been an in-line inspection device run at the point of failure?		YES	
g. If Yes, type of device run			
High Resolution Magnetic Flux tool	YES	Year run	2006
Low Resolution Magnetic Flux tool	NO	Year run	
UT tool	NO	Year run	
Geometry tool	YES	Year run	2006
Caliper tool	NO	Year run	
Crack tool	NO	Year run	
Hard Spot tool	NO	Year run	
Other tool	NO	Year run	
4. Failure occurred on		BODY OF PIPE	
Other (specify)			
Year the component that failed was installed		1963	
5. Maximum operating pressure (MOP)			

a. Estimated pressure at point and time of accident (PSIG)	228	
b. MOP at time of accident (PSIG)	685.00	
c. Did an over pressurization occur relating to the accident?	N	
PART D – MATERIAL SPECIFICATION		
1. Nominal pipe size (NPS) (inches)	30	
2. Wall thickness (inches)	.28	
3. Specification	API 5L	
SMYS	52000	
4. Seam type	DSAW	
5. Valve type		
6. Manufactured by	REPUBLIC STEEL	
in year	1963	
PART E - ENVIRONMENT		
1. Area of accident	UNDER GROUND	
Other (specify)		
2. Depth of cover (inches)	40	
PART F - CONSEQUENCES		
1. Consequences	**Fatalities**	**Injuries**
a. Number of operator employees	0	0
Contractor employees working for operator	0	0
General public	0	0
Totals	0	0
b. Was pipeline/segment shutdown due to leak?	Y	
If Yes, how long? Days	2	
Hours	8	
Minutes	5	
c. Product ignited	Gas did not Ignite	
d. Explosion	NO EXPLOSION	
e. Evacuation *(general public only)*	N	
Number of people		
Reason for Evacuation		
f. Elapsed time until area was made safe		
Hours		
Minutes		
2. Environmental Impact		
a. Wildlife Impact		
Fish/aquatic	N	
Birds	N	
Terrestrial	N	
b. Soil Contamination	Y	
If Yes, estimated number of cubic yards	770	
c. Long term impact assessment performed	Y	
d. Anticipated remediation	Y	
If Yes, check all that apply		
Surface Water	N	
Groundwater	N	
Soil	Y	
Vegetation	Y	
Wildlife	N	
e. Water Contamination	N	
Amount in water (barrels)		
Ocean/Seawater		
Surface		
Groundwater		
Drinking water		
Drinking water source		
PART G – LEAK DETECTION INFORMATION		
1. Computer based leak detection capability in place?	N	
2. Was the release initially detected by?	A THIRD PARTY	
Other (specify)		

3. Estimated leak duration Days	1
Hours	15
PART H – APPARENT CAUSE	
H1 – CORROSION	
1. External Corrosion	
2. Internal Corrosion	
Complete items a-e where applicable	
a. Pipe Coating	
b. Visual Examination	
Other (specify)	
c. Cause of Corrosion	
Other (specify)	
d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?	
Year Protection Started	
e. Was pipe previously damaged in the area of corrosion?	
Estimated time prior to accident Years	
Months	
H2 – NATURAL FORCES	
3. Earth Movement	
Description	
Other (specify)	
4. Lightning	
5. Heavy Rains/Floods	
Description	
Other (specify)	
6. Temperature	
Description	
Other (specify)	
7. High Winds	
H3 – EXCAVATION DAMAGE	
8. Operator Excavation Damage (including their contractors / Not Third Party)	
9. Third Party	Yes
a. Excavator group	EXCAVATOR OTHER THAN OPERATOR/SUBCONTRACTOR
b. Type	OTHER
Other (specify)	ENGINEERING TEST
c. Excavation was	SUB-STRATA (Boring, Directional Drilling, ect...)
d. Excavation was ongoing activity (Month or longer)	N
If Yes, Date of last contact	
e. Did operator get prior notification of excavation activity?	N
If Yes; Date received	null
Notification received from	
f. Was pipeline marked?	N
i. Temporary markings	
ii. Permanent markings	
iii. Marks were	
iv. Were marks made within required time?	
H4 – OTHER OUTSIDE FORCE DAMAGE	
10. Fire/Explosion as primary cause of failure	
Fire/Explosion cause	
11. Car, truck or other vehicle not relating to excavation activity damaging pipe	
12. Rupture of Previously Damaged Pipe	
13. Vandalism	
H5 – MATERIAL AND/OR WELD FAILURES	
Material	
14. Body of Pipe	

Description	
Other (specify)	
15. Component	
Description	
Other (specify)	
16. Joint	
Description	
Other (specify)	
Weld	
17. Butt	
Description	
Other (specify)	
18. Fillet	
Description	
Other (specify)	
19. Pipe Seam	
Description	
Other (specify)	
Complete a-g if you indicate any cause in part H5	
a. Type of failure	
Construction Defect	NO DATA
Description	
Material Defect	NO DATA
b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site?	
c. Was part which leaked pressure tested before accident occurred?	
d. Date of test	
Year	
Month	
Day	
e. Test medium	
Other (specify)	
f. Time held at test pressure (hr)	
g. Estimated test pressure at point of incident (PSIG)	
H6 – EQUIPMENT	
20. Malfunction of Control/Relief Equipment	
Description	
Other (specify)	
21. Threads Stripped, Broken Pipe Coupling	
Description	
Other (specify)	
22. Seal Failure	
Description	
Other (specify)	
H7 – INCORRECT OPERATION	
23. Incorrect Operation	
a. Type	
Other (specify)	
b. Number of employees involved who failed a post-accident test	
Drug test	
Alcohol test	
H8 - OTHER	
24. Miscellaneous	
Describe	
25. Unknown	
Describe	
PART I – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT	
ON OCTOBER 3, 2008 COLONIAL INSPECTOR RECEIVED A CALL FROM A GEO-PROBE CONTRACTOR STATING THAT THEY HIT COLONIAL PIPELINE'S 03 MAINLINE WITH A GEO-PROBE RIG. AT APPROXIMATELY 11:35 AM INSPECTOR ARRIVED ON SITE AND SAW PRODUCT LEAKING	

OUT OF THE GROUND ABOVE THE PIPELINE. AT THE TIME AND LOCATION OF THE STRIKE ULTRA-LOW DIESEL WAS IN THE LINE. THE INSPECTOR IMMEDIATELY CALL LINDEN OPERATORS AND ASK THEM TO CALL THE CONTROL CENTER TO SHUTDOWN THE LINE BECAUSE OF THE LINE STRIKE AND THE LEAKING PRODUCT. THE INSPECTOR THEN SPOKE WITH THE OPERATIONS MANAGER TO GIVE HIM INFORMATION ON LOCATION OF THE LINE HIT SO HE COULD REPORT IT TO NJDEP. AFTER THAT THE INSPECTOR CALLED 911 TO REPORT THE INCIDENT TO LOCAL RESPONSE PERSONNEL. THE OPERATION MANAGER CALLED NJDEP TO REPORT THE INCIDENT AT APPROXIMATELY 12:00 PM AND WAS GIVEN CASE # 081003-1204-42 BY OPERATOR 33. THE DISTRICT EMERGENCY NOTIFICATION WAS INITIATED AND RESPONSE EFFORTS WERE STARTED. THE EMERGENCY RESPONSE EFFORTS CONTINUED FROM FRIDAY OCTOBER 3RD THROUGH MONDAY OCTOBER 6TH. THE RELEASED WAS CAUSED BY A GEO-PROBE SUBCONTRACTOR WORKING FOR THE ENGINEERING FIRM HANDLING THE NEW JERSEY TURPIKE AUTHORITY'S WIDENING PROJECT. THE CONTRACTOR WAS NOT AUTHORIZED TO PROBE IN COLONIAL PIPELINE'S ROW. THE PLANNED PROBE LOCATION WAS 40 FEET OUTSIDE OF COLONIAL'S ROW. THE SURVEYOR'S STAKE FOR THE APPROVED LOCATION OF THE PROBE LOCATION WAS VISABLE FROM THE LEAK SITE. THERE WAS NO ACTIVE ONECALL FOR THE WORK THE CONTRACTOR WAS PERFORMING. THE PIPELINE WAS REPAIRED BY PUTTING A TYPE B STEEL SLEEVE ON SLEEVE OVER THE DAMAGED SECTION OF PIPELINE. TO DATE 1372.80 TONS OF SOIL HAVE BEEN REMOVED FROM THE SITE AND SENT TO BE RECYCLED . AT THIS TIME NO MORE SOIL IS ANTICIPATED TO BE REMOVED. THE SITE HAS BEEN BACKFILLED, GRADED AND ROAD RESTORED TO SERVICE FOR THE LAND OWNER. COLONIAL IS WORKING WITH THE THIRD PARTY WHO HIT THE LINE TO RESOLVE PROPERTY OWNER ISSUES. THE THIRD PARTY HAS ENTERED INTO AN MOA WITH THE STATE FOR FURTHER ENVIRONMENTAL SITE MONITORING AND ASSESSMENT WORK.

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	08/11/2014
	No.	20140287 - 20157 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	02/23/2015		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	07/22/2014 07:40		
5. Location of Accident:			
Latitude:	29.97507		
Longitude:	-94.05649		
6. National Response Center Report Number (if applicable):	NRC Notification Not Required		
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):			
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Gasoline (non-Ethanol)		
- If "Other" Subtype, Descr be:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	.70		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	.70		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	No
- If No, Explain:	Pipeline was not running at the time of the incident.
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	0
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	07/22/2014 07:40
18b. Local time Operator resources arrived on site:	07/22/2014 07:40

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77705
4. City	Beaumont
5. County or Parish	Jefferson
6. Operator-designated location:	Milepost/Valve Station
Specify:	0121
7. Pipeline/Facility name:	Colonial Pipeline Company / Hebert Station
8. Segment name/ID:	Line 01 Splitter Valve area
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Descr be:	
Depth-of-Cover (in):	12
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Tubing
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Descr be:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Descr be:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Descr be:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Descr be:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Descr be:	
- If Other, descr be:	
4. Year item involved in Accident was installed:	Unknown
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	Copper Tubing
6. Type of Accident Involved:	Other
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	
- If Other, Descr be:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	A backhoe pulled 3/8 inch tubing used for sampling off the instrument valve at the line tap.
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	No
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	
5c. Name of body of water, if commonly known:	
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect"	

determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 100
8c. Estimated cost of Operator's property damage & repairs	$ 900
8d. Estimated cost of Operator's emergency response	$ 4,000
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Descr be:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 5,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	10.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	275.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Descr be:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	

- If Yes, Which operational factors complicate execution? (*select all that apply*)	
- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Descr be:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Contractor working for the Operator
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	Release was the result of scheduled excavation work in the facility which did not involve control room personnel.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Descr be:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Descr be:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Descr be:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Descr be:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Descr be:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Descr be:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Descr be:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Descr be:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Descr be:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Descr be:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Descr be:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Descr be:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Excavation Damage by Operator's Contractor (Second Party)
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	No
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	Yes
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Contractor
10. Type of excavation equipment:	Backhoe/Trackhoe
11. Type of work performed:	Liquid Pipeline
12. Was the One-Call Center notified?	Yes
12a. If Yes, specify ticket number:	1469530018
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	Texas 811
13. Type of Locator:	Contract Locator
14. Were facility locate marks vis ble in the area of excavation?	Yes
15. Were facilities marked correctly?	Yes
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	Excavation Practices Not Sufficient
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	Excavation practices not sufficient (other)
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Descr be:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
- If Intentional Damage:	
8. Specify:	
- If Other, Descr be:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Descr be:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contr buting factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Descr be:	
- Mechanical Stress:	
- Other	
- If Other, Descr be:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Descr be:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Descr be:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Descr be:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Descr be:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Descr be:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Descr be:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Descr be:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Descr be:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At 07:40 on 7/22/14, a contract crew damaged a section of copper tubing during an excavation inside Hebert Station when a backhoe pulled the tubing off an instrument valve on a shipper line. The tubing was a 3/8 inch sample line running from one of Colonial's shipper lines to the nearby sample house. The tubing was ruptured and approx. 29 gallons of gasoline was released before the tubing was isolated. All released product was contained on company property in the immediate area, primarily inside a plastic access well. Cleanup was completed by contractors on site performing the work that day. No Federal, State or Local agency notifications were required due to the volume released and the fact that it was contained on company property.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Kevin McKay
Preparer's Title	Compliance Coordinator
Preparer's Telephone Number	601-765-9768
Preparer's E-mail Address	kmckay@colpipe.com
Preparer's Facsimile Number	770-754-8489
Authorized Signer Name	Drew Lohoff
Authorized Signer Title	Manager PHMSA Regulatory Compliance
Authorized Signer Telephone Number	678-762-2872
Authorized Signer Email	dlohoff@colpipe.com
Date	02/23/2015

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	08/13/2015
	No.	20150286 - 20902 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**

Last Revision Date:	11/12/2015
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	07/24/2015 14:15
5. Location of Accident:	
Latitude:	29.71897
Longitude:	-95.1793
6. National Response Center Report Number (if applicable):	NRC Notification Not Required
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel
- If "Other" Subtype, Descr be:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	1.90
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	1.90
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	07/24/2015 14:18
14b. Local time pipeline/facility restarted:	07/24/2015 15:20
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	0
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	07/24/2015 14:18
18b. Local time Operator resources arrived on site:	07/24/2015 14:18

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77506
4. City	Pasadena
5. County or Parish	Harris
6. Operator-designated location:	Milepost/Valve Station
Specify:	0120
7. Pipeline/Facility name:	Houston Station
8. Segment name/ID:	Line 02 Unit 5 case pressure switch tubing
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Descr be:	
Depth-of-Cover (in):	10
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Tubing
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Descr be:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Descr be:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Descr be:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Descr be:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Descr be:	
- If Other, descr be:	
4. Year item involved in Accident was installed:	1985
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	copper
6. Type of Accident Involved:	Other
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	
- If Other, Descr be:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	Excavation damage to tubing line for instrumentation
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	No
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	
5c. Name of body of water, if commonly known:	
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 240
8c. Estimated cost of Operator's property damage & repairs	$ 0
8d. Estimated cost of Operator's emergency response	$ 4,760
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Descr be:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 5,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	170.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	960.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Descr be:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Descr be:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Contractor working for the Operator
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	Release resulted from damage caused by contractor excavation activities. No controller or control room issues contributed to the incident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Descr be:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
2a. Specify how many were tested:	1
2b. Specify how many failed:	0

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Descr be:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Descr be:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Descr be:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Descr be:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Descr be:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Descr be:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Descr be:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Descr be:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Descr be:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Descr be:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Descr be:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Excavation Damage by Operator's Contractor (Second Party)
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	Yes
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	Yes
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Contractor
10. Type of excavation equipment:	Backhoe/Trackhoe
11. Type of work performed:	Liquid Pipeline
12. Was the One-Call Center notified?	Yes
12a. If Yes, specify ticket number:	1570565889
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	Texas 811
13. Type of Locator:	Contract Locator
14. Were facility locate marks vis ble in the area of excavation?	Yes
15. Were facilities marked correctly?	Yes
16. Did the damage cause an interruption in service?	Yes
16a. If Yes, specify duration of the interruption (hours)	1
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	Excavation Practices Not Sufficient
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	Failure to use hand tools where required
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Descr be:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
- If Intentional Damage:	
8. Specify:	
- If Other, Descr be:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Descr be:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contr buting factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Descr be:	
- Mechanical Stress:	
- Other	
- If Other, Descr be:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Descr be:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Descr be:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Descr be:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Descr be:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Descr be:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Descr be:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Descr be:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Descr be:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On 7/24/2015 at 14:15 a contract crew damaged a buried tubing line during excavation near the line 02 unit 5 discharge valve inside Houston Station. The 3/8 inch armor-coated tubing was connected to unit 5 case pressure instrumentation. The tubing was struck by a mini excavator and pulled apart, releasing 80 gallons of diesel fuel before it was isolated. Internal notifications were made and a technician and contractor crew working at the site immediately started clean up and repair activities. Temporary repairs were completed by 15 00 and the line was restarted at 15:20. Final cleanup efforts were completed by 18:50. All released product was contained on company property in the immediate area. No immediate state, local or federal agency notifications were required due to the volume released and that it was contained on company property. A post-accident drug and alcohol test was conducted on the contract operator of the mini excavator.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Kevin McKay
Preparer's Title	Compliance Coordinator
Preparer's Telephone Number	601-765-9168
Preparer's E-mail Address	kmckay@colpipe.com
Preparer's Facsimile Number	770-754-8489
Authorized Signer Name	Drew Lohoff
Authorized Signer Title	PHMSA Compliance Manager
Authorized Signer Telephone Number	678-762-2872
Authorized Signer Email	dlohoff@colpipe.com
Date	11/12/2015

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	09/12/2015
	No.	20150326 - 22637 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**

Last Revision Date:	09/13/2017
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	08/13/2015 10:52
5. Location of Accident:	
Latitude:	35.483852
Longitude:	-80.735273
6. National Response Center Report Number (if applicable):	1125539
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	08/13/2015 11:45
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel
- If "Other" Subtype, Descr be:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	139.64
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	138.69
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	08/13/2015 11:10
14b. Local time pipeline/facility restarted:	08/13/2015 23:00
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	0
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	08/13/2015 11:10
18b. Local time Operator resources arrived on site:	08/13/2015 11:10

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	North Carolina
3. Zip Code:	28081
4. City	Kannapolis
5. County or Parish	Cabarrus
6. Operator-designated location:	Milepost/Valve Station
Specify:	0820
7. Pipeline/Facility name:	Kannapolis Booster Station
8. Segment name/ID:	Map 11 of 42
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Exposed due to excavation
- If Other, Descr be:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe
- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	36

3b. Wall thickness (in):	.375
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	46,000
3d. Pipe specification:	5L
3e. Pipe Seam , specify:	DSAW
- If Other, Descr be:	
3f. Pipe manufacturer:	Bethlehem Steel
3g. Year of manufacture:	Unknown
3h. Pipeline coating type at point of Accident, specify:	Asphalt
- If Other, Descr be:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Descr be:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Descr be:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Descr be:	
- If Other, descr be:	
4. Year item involved in Accident was installed:	2002
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Other
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	
- If Other, Descr be:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	A valve was dislodged from pipe due to contact with excavator bucket.

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	Yes
- Soil	Yes
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	Yes
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	10.00
5c. Name of body of water, if commonly known:	Groundwater contaminated, no named body of water.
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect"	

determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Unusually Sensitive Area (USA) - Ecological	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 8,250
8c. Estimated cost of Operator's property damage & repairs	$ 2,500
8d. Estimated cost of Operator's emergency response	$ 160,000
8e. Estimated cost of Operator's environmental remediation	$ 25,000
8f. Estimated other costs	$ 0
Descr be:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 195,750

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	400.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	650.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Descr be:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	

- If Yes, Which operational factors complicate execution? (*select all that apply*)	
- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Descr be:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Contractor working for the Operator
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The Control Room was not involved.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Descr be:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
2a. Specify how many were tested:	2
2b. Specify how many failed:	0

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Descr be:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Descr be:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Descr be:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Descr be:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Descr be:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Descr be:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Descr be:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Descr be:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Descr be:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Descr be:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Descr be:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Excavation Damage by Operator's Contractor (Second Party)
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	Yes
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	Yes
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Contractor
10. Type of excavation equipment:	Backhoe/Trackhoe
11. Type of work performed:	Liquid Pipeline
12. Was the One-Call Center notified?	Yes
12a. If Yes, specify ticket number:	151971968
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	N/A
13. Type of Locator:	Utility Owner
14. Were facility locate marks vis ble in the area of excavation?	Unknown/Other
15. Were facilities marked correctly?	Yes
16. Did the damage cause an interruption in service?	Yes
16a. If Yes, specify duration of the interruption (hours)	12
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	Excavation Practices Not Sufficient
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	Improper backfilling
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Descr be:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
- If Intentional Damage:	
8. Specify:	
- If Other, Descr be:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Descr be:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contr buting factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Descr be:	
- Mechanical Stress:	
- Other	
- If Other, Descr be:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Descr be:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Descr be:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Descr be:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Descr be:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Descr be:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Descr be:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Descr be:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Descr be:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On August 13, 2015 at approximately 11:00am, a contract crew backfilling the L2 Station Discharge Valve struck a 3/4 inch valve attached to he top of Line 2. The onsite contract inspector immediately notified he control center and the line was shut down. Local personnel were notified immediately and containment and clean-up activities commenced. The outlet valve to the sub-surface manifold yard drain oil/water separator was closed immediately following the release. Free product was collected from hand-dug recovery pits and hand augured wells. Groundwater was impacted, but there were no impacts to surface water or the facility pond. Impacted soil was transported to Soilworks, Inc. located in Selma, NC for disposal. Recovered product/water was taken to Heritage-Crystal Clean (formerly FCC) located in Concord, NC for treatment and recycling/disposal. Contaminated sorbents were drummed and shipped via Zebra Environmental , High Point, NC for treatment and disposal to Uwharrie Regional Landfill located in Mount Gilead, NC.

Repairs to the pipeline commenced immediately following the release. The ¾ threaded hole was plugged and a 3 inch weldolet and weld cap were welded over the top.

A call was placed to NRC on 8-13-15 based on the fact that the estimated cost of he incident would likely exceed $50,000. Since the spill impacted groundwater, the North Carolina DENR was notified at 12:00. A Notification of Discharge form was also submitted to NC DENR Mooresville office on August 13 h, 2015 via email.

Approximately 4950 gallons of free product was recovered using vac trucks and sorbent material. Recovered material was transported to Heritage-Crystal Clean in Charlotte, NC for treatment and disposal.

Approximately 449 tons of impacted soil was removed. Based on product in soil calculations the soil was estimated to contain an additional 875 gallons of product bringing the total product recovered to 5825 gallons. An estimated 20 tons of additional impacted soil could not be removed without undermining part of the manifold area infrastructure. Based on product in soil calculations an additional 40 gallons remains in those areas. An air sparge / soil vapor extraction system approved by NCDEQ has been installed to address remaining soil and water impacts. The total release estimate is 5865 gallons.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Denise Langley
Preparer's Title	Compliance Coordinator
Preparer's Telephone Number	770-819-3574
Preparer's E-mail Address	dlangley@colpipe.com
Preparer's Facsimile Number	
Authorized Signer Name	Jonathan B Bernhardt
Authorized Signer Title	Manager - PHMSA Regulatory Compliance
Authorized Signer Telephone Number	6787622203
Authorized Signer Email	jbernhardt@colpipe.com
Date	09/13/2017

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	08/25/2017
	No.	20170264 - 23174 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**

Last Revision Date:	02/22/2018
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	08/06/2017 10:45
5. Location of Accident:	
Latitude:	30.713929
Longitude:	-91.275048
6. National Response Center Report Number (if applicable):	NRC Notification Not Required
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Gasoline (non-Ethanol)
- If "Other" Subtype, Descr be:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	12.40
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	12.40
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	08/06/2017 10:56
14b. Local time pipeline/facility restarted:	08/06/2017 14:35
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	0
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	08/06/2017 10:45
18b. Local time Operator resources arrived on site:	08/06/2017 10:45

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Louisiana
3. Zip Code:	70748
4. City	Jackson
5. County or Parish	East Feliciana
6. Operator-designated location:	Milepost/Valve Station
Specify:	0222
7. Pipeline/Facility name:	Baton Rouge Junction
8. Segment name/ID:	Instrumentation tubing
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Descr be:	
Depth-of-Cover (in):	4
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Tubing
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Descr be:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Descr be:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Descr be:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Descr be:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Descr be:	
- If Other, descr be:	
4. Year item involved in Accident was installed:	1985
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	Armor-coated copper tubing
6. Type of Accident Involved:	Other
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	
- If Other, Descr be:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	Excavation damage to instrumentation tubing line.

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	No
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	No
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	
5c. Name of body of water, if commonly known:	
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 0
8c. Estimated cost of Operator's property damage & repairs	$ 500
8d. Estimated cost of Operator's emergency response	$ 1,500
8e. Estimated cost of Operator's environmental remediation	$ 1,500
8f. Estimated other costs	$ 0
Descr be:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 3,500

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	539.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Descr be:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Descr be:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Contractor working for the Operator
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	Release resulted as a direct result of damage caused by contractor excavation activities. No controller or control room issues contributed to the incident..
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Descr be:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
2a. Specify how many were tested:	1
2b. Specify how many failed:	0

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Descr be:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Descr be:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Descr be:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Descr be:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Descr be:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Descr be:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Descr be:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Descr be:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Descr be:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Descr be:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Descr be:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Excavation Damage by Operator's Contractor (Second Party)
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	Yes
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	Yes
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Contractor
10. Type of excavation equipment:	Backhoe/Trackhoe
11. Type of work performed:	Liquid Pipeline
12. Was the One-Call Center notified?	Yes
12a. If Yes, specify ticket number:	170333433
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	LA 811
13. Type of Locator:	Contract Locator
14. Were facility locate marks vis ble in the area of excavation?	Data not collected
15. Were facilities marked correctly?	Data not collected
16. Did the damage cause an interruption in service?	Yes
16a. If Yes, specify duration of the interruption (hours)	3
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	Excavation Practices Not Sufficient
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	Failure to verify location by test-hold (pot-holing)
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Descr be:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
- If Intentional Damage:	
8. Specify:	
- If Other, Descr be:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Descr be:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contr buting factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Descr be:	
- Mechanical Stress:	
- Other	
- If Other, Descr be:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Descr be:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Descr be:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Descr be:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Descr be:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Descr be:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Descr be:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Descr be:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Descr be:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Descr be:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On 8/6/17, a contractor crew was preforming soil remediation related to a spill that occurred on 8/4/17. At approximately 10:45 CST, their excavator struck a buried tubing line near the line 01 Control Valve inside Baton Rouge Station. Striking of the tubing line broke the nipple below he shut-off valve on he tubing valve-tree and resulted in a release of approximately 12.3 bbls of gasoline inside the access well. The Inspector immediately notified Operations which contacted the Control Center and isolated and bypassed the sta ion at approximately 10:56. Operators locked-out and drained the station piping which stopped the leak at approximately 11:30. All released product was contained on company property within the access well. A vacuum truck that was staged nearby was immediately deployed to the access well where he product was contained. The Parish LEPC and State of LA were each notified.

A technician was mobilized who replaced he damaged tubing section at approximately 14:15 and Baton Rouge Station LN01 was restarted at approximately 14:35. Product recovery and cleanup activities were completed on 8/6/17 by 11:30. Initial investigation indicated tubing was struck due to failure to follow Colonial's Excavation Procedure; did not properly locate/verify depth of tubing prior to excavation. Excavator operator, spotter and inspector OQs were suspended as a result.

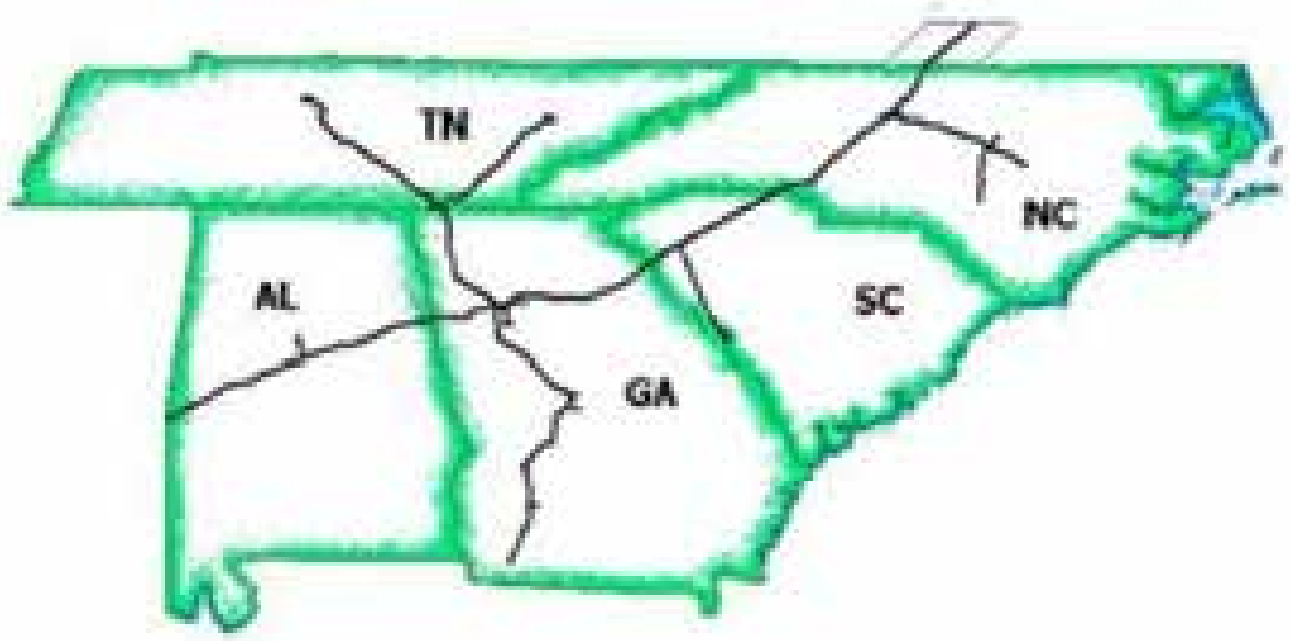
Final Report Update: Incident Analysis was completed on 1/24/18, confirming the apparent cause and provided recommendations related to locating buried tubing. Regarding zero Commodity Costs, the released product was recovered from a partially water filled access well, was not contaminated, and therefore returned to the pipeline system via transmix injection.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Kevin McKay
Preparer's Title	Compliance Coordinator
Preparer's Telephone Number	601 765-9168
Preparer's E-mail Address	kmckay@colpipe.com
Preparer's Facsimile Number	770 754-8489
Authorized Signer Name	Jonathan B. Bernhardt
Authorized Signer Title	Manager Pipeline Compliance
Authorized Signer Telephone Number	678 762-2203
Authorized Signer Email	jbernhardt@colpipe.com
Date	02/22/2018

Colonial Pipeline Company
Emergency Response Plans

Southeast Response Zone



Colonial Pipeline Company

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Colonial Pipeline Company

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Branch Director ..... Generic
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Colonial Pipeline Company

CONSISTENCY WITH CONTINGENCY PLANS

CONSISTENCY WITH THE NATIONAL CONTINGENCY PLAN

The Emergency Response Plans submitted by Colonial Pipeline Company for each of its three response zones will be reviewed and revised periodically to maintain consistency with applicable parts of the National Contingency Plan.

CONSISTENCY WITH THE APPLICABLE AREA CONTINGENCY PLANS

The Emergency Response Plans submitted by Colonial Pipeline Company for each of its three response zones will be reviewed and revised periodically to maintain consistency with the Area Contingency Plans applicable to Colonial's pipeline system.

Applicable Area Contingency Plans administered by the U.S. Coast Guard and EPA as well as their corresponding Colonial/PHMSA response zones are identified below:

Colonial Pipeline Company

CONSISTENCY WITH CONTINGENCY PLANS

CPC District	PHMSA Response Zone	Applicable ACP's, GRP's, & IACP's
GULF COAST DISTRICT	**801**	**One Gulf Plan**
		Sector Houston/Galveston
		MSU Port Arthur
		MSU Morgan City
		MSU New Orleans
		EPA Region VI Regional IACP
SOUTHEAST DISTRICT	**802**	**EPA Region IV** Oil & Hazardous Substances Pollution Regional and Area Contingency Plan
		EPA Region III Inland Area Committee Plan
NORTHEAST DISTRICT	**803**	**EPA Region II**
		EPA Region III Inland Area Committee Plan
		USCG Sector Delaware Bay ACP **USCG New York and New Jersey ACP** **USCG Upper Chesapeake ACP** **USCG Hampton Roads ACP**

Colonial Pipeline Company
SOUTHEAST RESPONSE ZONE

INFORMATION SUMMARY

Name and Address of Operator:

Colonial Pipeline Company
P. O. Box 1624
Alpharetta, GA 30009-9934

SIGNIFICANT & SUBSTANTIAL HARM

The volume of petroleum products transported by the Colonial Pipeline system (and the criteria set forth in DOT49CFR§194.103) dictate that a release of oil at any point in any line segment could cause significant and substantial harm. Therefore, all Response Zones are identified as having the potential for causing significant and substantial harm.

DESCRIPTION OF RESPONSE ZONES

Colonial Pipeline Company has identified three response zones for its pipeline system. Currently, these response zones correspond with the three operating districts of Colonial's pipeline system. The response zones for the entire pipeline system are listed according to PHMSA zone numbers and name of the Colonial operating area, including states and counties.

QUALIFIED INDIVIDUAL

Southeast Response Zone:		**Alternate:**
Angela Kolar 3925 Anderson Farm Rd Austell, Ga 30106		Darren Pruitt 7029 Albert Pick Road Suite 205 Greensboro, NC 27409
Cell Phone: (b) (6) [redacted]		Office Phon[redacted]06 Cell Phone: (b) (6) [redacted]

The Qualified Individual (QI) will generally also serve as the Incident Commander during an emergency response. Currently, the QI for each response zone is the Director of Operations of the pipeline operational area and as such has the authority to expend company resources in response to an oil spill event. The Qualified Individuals are available on a 24-hour basis, and their contact information can be found above and in Section 5.01 of this plan. Notification of response resources is conducted under the direction of the QI, which occurs following the initial notification process detailed in Section 2.03.

WORST CASE DISCHARGE

(b) (3), (b) (7)(F) [redacted]
(b) (3), (b) (7)(F) [redacted]

Colonial Pipeline Company
SOUTHEAST RESPONSE ZONE

PHMSA Response Zone 802
Colonial Response Zone: Southeast

South Carolina Counties
Abbeville
Aiken
Anderson
Cherokee
Edgefield
Greenville
Greenwood
Laurens
McCormick
Spartanburg
York

Tennessee Counties
Bradley
Coffee
Davidson
Grundy
Hamilton
Knox
Loudon
Marion
McMinn
Monroe
Rutherford

Alabama Counties
Bibb
Calhoun
Cleburne
Green
Hale
Jefferson
Saint Clair
Shelby
Sumter
Talladega
Tuscaloosa

Georgia Counties
Baker
Barrow
Bartow
Bibb
Carroll
Catoosa
Chattooga
Clarke
Clayton
Cobb
Crawford
Decatur
Dekalb
Dougherty
Douglas
Elbert
Fayette
Floyd
Fulton
Gwinnett
Harralson
Hart
Henry
Jackson
Lamar
Lee
Macon
Madison
Mitchell
Monroe
Paulding
Peach
Richmond
Schley
Spalding
Sumter
Walker

North Carolina Counties
Alamance
Cabarrus
Chatham
Cleveland
Cumberland
Davidson
Gaston
Guilford
Harnett
Johnston
Mecklenburg
Rockingham
Rowan
Wake

Virginia Counties
Danville
Halifax
Pittsylvania

Colonial Pipeline Company

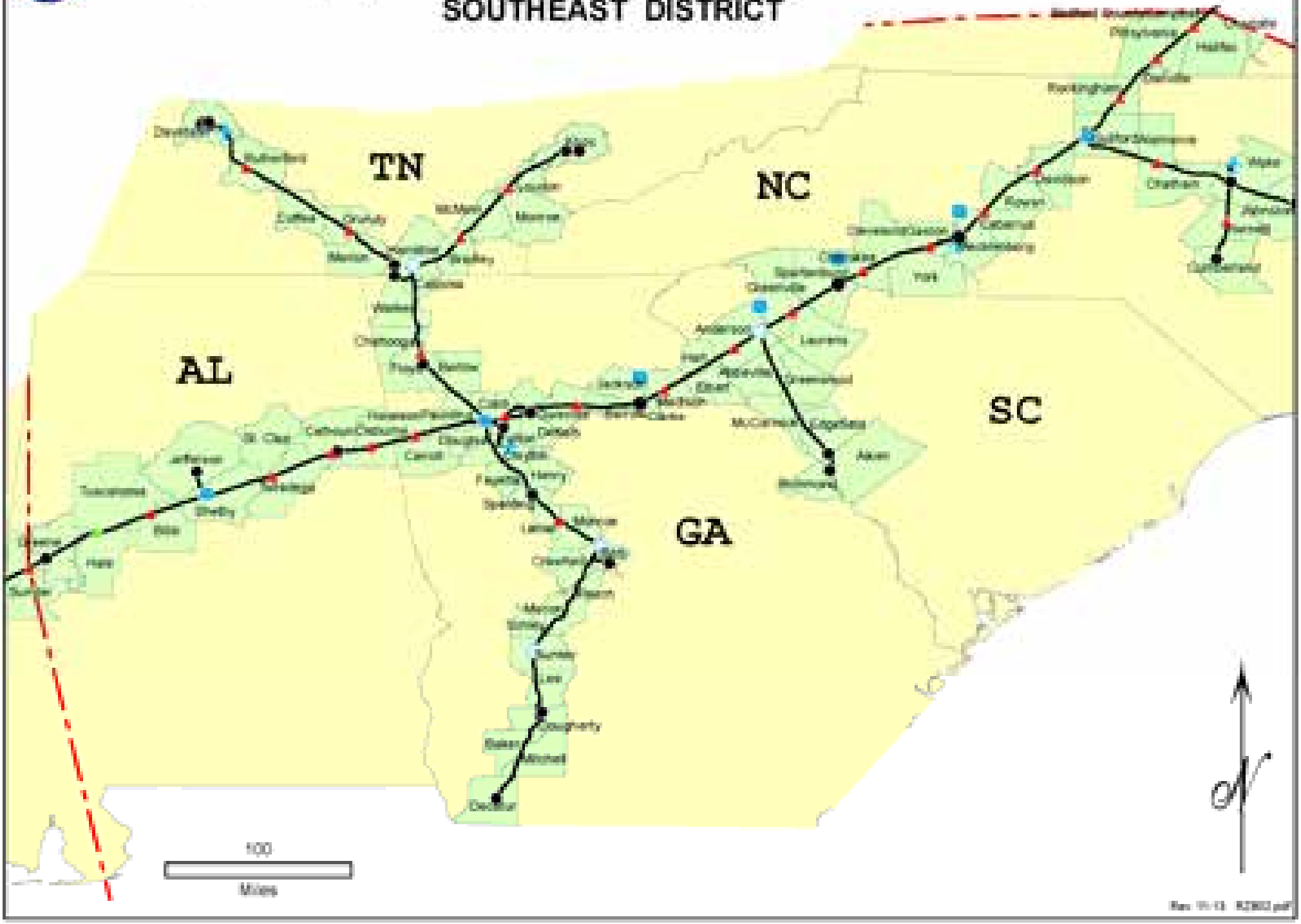
RESPONSE ZONE 802 – SOUTHEAST DISTRICT

Coverage:
Epes Station to Staunton River, VA
Atlanta Stublines
Belton Stublines
Greensboro Stublines

Line Name	Line No.	Dia.	Miles
Epes Station to Staunton River, VA	1	36”	224.8
	1	40”	326.6
	2	36”	552.2
	3	36”	89.0
	4	32”	89.0
Pelham to Birmingham	12	16”	14.4
Atlanta to Doraville	13	8”/12”	23.7
	14	8”	9.4
	15	10”/12”	24.1
Atlanta to Hartsfield	16	8”/12”	27.2
Atlanta to Bainbridge	17	12”	253.9
	17M	6”	8.3
	17A	8”	2.2
Atlanta to Knoxville	18	10”/16”	198.4
Atlanta to Nashville	19	10”/12”	239.7
	20	8”/10”	239.3
Belton to Augusta	29	16”	74.1
Greensboro to Selma	22	16”	106.5
	23	8”	73.9
	24	8”	84.9
	24F	6”	44.5
Stand-By Lines	14S	8”/12”	1.8
	17S	8”	88.7
	18S	10”	89.8
	21	8”	76.6
	21S	8”	7.4
	23S	8”	32.6
	24S	8”	32.6

Colonial Pipeline Company

RESPONSE ZONE 802
SOUTHEAST DISTRICT



Colonial Pipeline Company

STATEMENT OF SIGNIFICANT AND SUBSTANTIAL HARM

It has been determined that a pipeline rupture occurring in ***any line segment of the pipeline system*** could cause significant and substantial harm based on the criteria listed below.

Pipeline Diameters comprising the line segments.

Volumes transported.

Products transported through the pipeline system:

gasoline
kerosene
fuel oil
jet fuels
transmix

Subpart B, 49 CFR §194.103

It is important to note that because any line segment could result in a high volume release with the potential for substantial harm, Colonial has contracted with a sufficient number of OSRO's with the capability of responding along the pipeline system within the Tier 1 time frame. Information related to Colonial's contracted OSRO's can be found in Sections 5.05.

Colonial Pipeline Company

America's Energy Lifeline

ANGELA KOLAR
Southeast District Director, Operations

PHONE: 770-861-4267

CERTIFICATION OF RESPONSE PREPAREDNESS

Colonial Pipeline Company hereby certifies to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) that it has identified, and ensured by contract, or other means approved by PHMSA, the availability of private personnel and equipment to respond, in the maximum extent practicable to a worst case discharge or a substantial threat of such a discharge.

Colonial Pipeline Company

Date: 1-6-16

Angela Kolar
Southeast District Director, Operations

This Certification of Response Preparedness was acknowledged before me by Angela Kolar on behalf of said Corporation.

TERRI L ARNOLD
NOTARY PUBLIC
PAULDING COUNTY, GEORGIA
MY COMM. EXPIRES
07/23/2016

1-6-16
Date

Terri L Arnold
Notary

7-23-16
My Commission Expires

(Seal)

Colonial Pipeline Company

America's Energy Lifeline

Scott A. Dooley	PHONE: (678) 762-2438
Contracts Manager	FAX: (770) 754-8290

CERTIFICATION OF RESPONSE RESOURCES

Colonial Pipeline Company hereby certifies to the U.S Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA) that is has identified, and ensured by contract, or other means approved by PHMSA, the availability of private personnel and equipment to respond, in the maximum extent practicable to a worst case discharge or a substantial threat of such a discharge.

This includes contracts with Oil Spill Removal Organizations (OSROs) in each of the operating Districts. More information on Colonial's OSRO, please refer to ERP Section 5.05.00 Oil Spill Removal Organizations – OSROS. For certification purposes for this plan, pertinent information includes:

Region 801 (Gulf Coast District-GCD)

Contractor	Contract #	Last Update
OIL MOP,LLC	107-07	08/01/08
AMERICAN POLLUTION CONTROL CORP	101-07	10/01/10
ENVIRONMENTAL SAFETY & HEALTH CONSULTING SERVICES INC	51-08	10/01/10
UNITED STATES ENVIRONMENTAL SERVICES LLC	95-07	10/01/10
MARINE SPILL RESPONSE CORPORATION (MSRC)	06-10	08/15/14

Region 802 (Southeast District-SED)

Contractor	Contract #	Last Update
MARINE SPILL RESPONSE CORPORATION (MSRC)	06-10	08/15/14
HEPACO LLC	111-07	10/20/12
MARION ENVIRONMENTAL INC	11-11	07/01/11
SWS ENVIRONMENTAL SERVICES	29-14	03/23/15
UNITED STATES ENVIRONMENTAL SERVICES LLC	95-07	10/01/10
W.E.L., INC .	112-07	12/01/07
CLEAN HARBORS ENVIRONMENTAL SERVICES CO, INC	74-07	10/01/10

Region 803 (Northeast District-NED)

Contractor	Contract #	Last Update
MARINE SPILL RESPONSE CORPORATION (MSRC)	06-10	08/15/14
TRIUMVIRATE ENVIRONMENTAL INC	114-07	12/14/12
CLEAN HARBORS ENVIRONMENTAL SERVICES CO, INC	74-07	10/01/10
W.E.L., INC .	112-07	12/01/07
HEPACO LLC	111-07	10/20/12
MILLER ENVIRONMENTAL GROUP INC	115-07	01/12/16

Colonial Pipeline Company

WORST CASE DISCHARGE

SOUTHEAST RESPONSE ZONE

PHMSA Response Zone 802

OVERVIEW

This section presents the Worst Case Discharge (WCD) for Colonial's Southeast Response Zone providing the methodology used to arrive at the volume, including calculations. The WCD for both system tankage and pipeline scenarios are provided below.

WORST CASE DISCHARGE – TANKAGE

The WCD from Colonial tankage is calculated based on the capacity of the single largest tank within a single secondary containment system adjusted for the capacity of the secondary containment system. The largest capacity tankage in Colonial's Southeast Response Zone is summarized in Table 1 below.

Table 1

Largest Volume Tank Location(s):	Tank No.	Capacity (barrels)	70% Credit (See below)	Worst Case Discharge Volume
[redacted]				
	[redacted]	[redacted]	[redacted]	[redacted]

In accordance with 49CFR 194.105(b)(4), operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures. The maximum allowable percentage (credit) is 75 percent. Following these criteria, Colonial is entitled to claim a 70 percent credit on the WCD as outlined in Table 2.

Table 2

Prevention Measure	Standard	Credit (percent)
Secondary containment > 100 %	NFPA 30	50% (claimed)
Built / repaired to API standards	API STD 620/650/653	10% (claimed)
Overfill protection standards	API RP 2350	5% (claimed)
Testing / cathodic protection	API STD 620/650/653	5% (claimed)
Tertiary containment / drainage / treatment	NFPA 30	5% (not claimed)
Maximum allowable credit		75%
Total claimed credit		**70%**

Colonial Pipeline Company

WORST CASE DISCHARGE

WORST CASE DISCHARGE – PIPELINE

Location

STATE:	Georgia
COUNTY:	(b) (7)(F), (b) (3) [redacted]
LINE NUMBER:	
LOCATIONS NUMBER:	
ALIGNMENT MAP NUMBER:	
USGS MAP NUMBER:	
UPSTREAM ISOLATION LOCATION:	
LEAK STATION NUMBER:	
DOWNSTREAM ISOLATION LOCATION:	

APPROXIMATE PHYSICAL LOCATION: (b) (7)(F), (b) (3) [redacted]

Construction / Operating Parameters

PIPE DIAMETER:	(b) (3), (b) (7)(F) [redacted]
WALL THICKNESS:	
MAXIMUM FLOW RATE:	
VOLUME/FOOT:	
CONTRIBUTING FOOTAGE:	

Colonial uses a proprietary Pipeline Simulation Software to calculate the WCD along the pipeline system. The model calculates the total discharge (Vt) at any given location along the pipeline following a line rupture accounting for the dynamic discharge (Vd) before the line segment is operationally isolated, the static or gravity drain (Vs), and the pipeline elevation profile.

Dynamic discharge is the total fluid outflow at the rupture before the pipeline is shut down and the line segment containing the rupture is operationally isolated. During this period, the pipeline flow rate could be much higher than its normal operating flow rate depending on the relative location of the rupture to the adjacent pumping stations. This transient flow rate, however, cannot exceed the maximum capacity of pump units upstream of the rupture due to the limitation of horsepower installed and to the characteristic of turbo machinery. Based on these parameters, an estimate of the dynamic discharge can be made by assuming the maximum capacity of the pumps being operated prior to the rupture, as the discharge flow rate for the period between rupture occurrence and pipeline shutdown.

Static drain discharge is considered to be the total fluid outflow at the rupture location due to the difference of elevations between the rupture and other high points on the pipeline except that isolated by either elevation or remote-controlled valves. The fluid momentum and the siphoning effect, for practical purposes, can be ignored.

The WCD for pipeline segments can be expressed as:

$$V_t = V_d + \Sigma V_s$$

Where:

V_t = total WCD volume, in barrels
V_d = dynamic discharge volume, in barrels
V_s = static discharge volume, comprised of the gravity drain from both upstream and downstream segments based on the elevation profile, in barrels

Colonial Pipeline Company

WORST CASE DISCHARGE

Assumptions:

Scenario is a guillotine rupture (100% volume - out);
Following a line rupture, the pipeline segment that contains the rupture will be remotely shut down and isolated within three (3) minutes;
For the dynamic discharge calculation, the discharge flow rate will be the flow rate that the immediate upstream pump station is capable of; and
Except for the installed check valves and remotely controlled block valves, no further segment isolation is assumed by closing the manual isolation valves.

The dynamic discharge component (V_d) is determined by multiplying the timeframe to operationally isolate the line segment by the design throughput:

V_d = (b) (3), (b) (7)(F) [redacted]
V_d = (b) (3), [redacted]

The static/gravity discharge component (V_s) is the gravity drain volume from both upstream and downstream segments based on the elevation profile in the Pipeline Simulation Software. The volume excludes that which is isolated by either elevation or remote-controlled valves

V_s = (b [redacted]
V_s = (b) (3), (b) (7)(F) [redacted]
V_s = (b) (3), (b) (7)(F) [redacted]

Therefore:

Total WCD (V_t) = V_d + V_s
V_t = (b) (3), (b) (7)(F) [redacted]
V_t = (b) (3), (b) (7)(F) [redacted]

Based on these calculations, the maximum calculated WCD from the pipeline for the Southeast Response Zone is (b) (3), (b) (7)(F) [redacted]

HISTORICAL DISCHARGE COMPARISON

A review of historical releases from the Colonial system shows that the largest release volume in the Southeast Response Zone was 22,800 bbl which does not exceed either of the WCD estimates for the tankage or pipeline scenarios.

Colonial Pipeline Company

WORST CASE DISCHARGE – SCENARIO

(b) (3), (b) (7)(F) [redacted]

PURPOSE

This section provides a discussion of the worst case discharge scenario developed for the Southeast District and describes the actions that Colonial Pipeline Company would undertake in response to a spill of this magnitude. The worst case discharge is from (b) (3), (b) (7)(F) located at the southwest corner of the distillate storage area.

OBJECTIVE

The objective of assessing the worst case discharge is to develop a plan to respond to the threat of an oil discharge and to contain, recover, and mitigate within the shortest feasible time. Developing the capability to prevent or mitigate adverse effects on natural resources, environmentally sensitive areas, municipal, industrial and other services is implied.

A. Worst Case Discharge Response Scenario

<u>Scenario Development</u>

A worst-case discharge scenario involving breakout (b) (3), (b) (7)(F) [redacted] (b) (3), (b) (7)(F) is chosen for its proximity to an area where drainage away from the facility's retention lakes is possible. (b) (3), (b) (7)(F) is surrounded by an earthen secondary containment dike common to one other tank. This dike has an average depth of twelve feet (12 ft.) and has more than sufficient capacity to contain the entire contents of the tank.

This scenario assumes a brittle fracture type failure similar to the Ashland Oil spill at Florette, PA on January 2, 1988. Statistics from the Ashland incident indicate that approximately 18% of the total volume spilled escaped secondary containment into the Monongahela River. For planning purposes and this scenario, it is assumed that (b) (3), (b) (7)(F) f distillate product (fuel oil or kerosene) will breach the dike and escape the secondary containment around (b) (3), (b) (7)(F)

The (b) (3), (b) (7)(F) has a series of catch basins, pipes, and ditches designed to divert watershed runoff and spills to the lakes. The facility features two lakes in a valley between the two breakout tank clusters. The lakes are designed with underflow outlets. Product flowing into the lakes will float on the surface of the water and will have to accumulate to a height of more than 24" above high water mark before it will overflow across the dike and escape these containments.

It is assumed that the spilled volume (b) (3), (b) (7)(F) that escapes from the tank dike would initially flow overland in a westerly direction, bypass the on-site lake, and enter a small stream at the lake effluent that flows to the south.

<u>Time of Year/Weather</u>

This scenario takes place in the month of January. This month is chosen because it is when the ambient temperatures occur most frequently which are likely to allow a brittle fracture to occur. The scenario begins at dusk.

Colonial Pipeline Company

WORST CASE DISCHARGE – SCENARIO

Scenario weather calls for a wet weather (steady rain) with temperatures in the mid-30's. The rain will facilitate the down gradient movement of the product.

Topography, Drainage, and Resources at Risk

Topography: The topography of the area in the tank farm is graded generally flat within the breakout tanks containment area. (b) (3), (b) (7)(F) is located at the southern-most point of Colonial's storage facility. The area proximate to the tank in question is bordered by Colonial's property to the west and (b) (3), (b) (7)(F) (b) (3), (b) (7)(F) to the south. The area between the tank farm and (b) (3), (b) (7)(F) is part of Colonial's facility and is wooded, with heavy underbrush, undeveloped land. The areas south of (b) (3), (b) (7)(F) (b) (3), (b) (7)(F) have several industrial developments, community parks, and some residential areas. Land is relatively level bisected by a wooded stream valley that is 20 to 30 feet lower than the adjacent developed areas.

Drainage: For the purpose of this exercise, it is assumed that product would splash over the containment dike towards the west, flow overland in a down gradient, westerly direction for approximately .20 miles and then continue in a southerly direction for .20 miles, leaving Colonial's property via a small, slow flowing stream that crosses under (b) (3), (b) (7)(F). This stream is a tributary of (b) (3), (b) (7)(F) (b) (3), (b) (7)(F) The released product will continue in a southerly flow within the creek for .60 miles to the crossing of (b) (3), (b) (7)(F) At this crossing, the advance of the product will be hindered by two man-made lakes that block the stream channel at both sides of (b) (3), (b) (7)(F) The southern-most lake is .25 miles upstream of the confluence with (b) (3), (b) (7)(F). After the confluence with (b) (3), (b) (7)(F) (b) (3), (b) (7)(F) the drainage basin continues for approximately 1.1 miles to the crossing of (b) (3), (b) (7)(F)

From this point, (b) (3), (b) (7)(F) continues in a southerly direction for approximately 1.3 miles to the confluence with (b) (3), (b) (7)(F) The channel is bordered by (b) (3), (b) (7)(F) to the west and some residential developments to the east. The northern-most point of (b) (3), (b) (7)(F) is approximately 4.0 miles down gradient of (b) (3), (b) (7)(F).

For purposes of this exercise, it is assumed that the balance of the product that does not escape Colonial's facility will be collected by the tank dikes, catch basins, and drainage pipes and retained within the tank farm.

Resources At Risk: Public and response worker safety would be the top priority concern for any spill scenario. Colonial would quickly establish communications with the appropriate local emergency responders in the area of the tank farm. The purpose of this communication would be to coordinate Colonial's response to this specific incident with these agencies to best utilize available resources to protect the general public as the spill event progresses. Specific actions will be discussed further under "countermeasures" below.

After leaving Colonial's property and crossing under (b) (3), (b) (7)(F), the tributary of (b) (3), (b) (7)(F) (b) (3), (b) (7)(F)r continues in a southerly direction through industrially-developed areas for 2.25 miles to the intersection with (b) (3), (b) (7)(F) From this crossing southward and including (b) (3), (b) (7)(F) the areas to the (b) (3), (b) (7)(F) and Golf Course, and residential developments to the east.

As indicated in Section 9.06 of this Manual, (b) (3), (b) (7)(F)

(b) (3), (b) (7)(F) [redacted]

There are no historical landmarks immediately threatened by this scenario.

B. Initial Incident Command Issues and Organization

The local Operations Manager would act as the Colonial OSC (On-Scene Commander) until relieved by either the Director of Operations or the Corporate Response Team. Federal, state, and local agencies would assist and provide input to the spill effort. Information that could be provided would include locations of rare and endangered species, historic sites, drinking water and industrial water intakes, and other environmentally sensitive areas. Unless otherwise indicated by the Federal OSC, Colonial would follow the Colonial ICS for (b) (3), (b) (7)(F) [redacted] and the Southeast District. In addition to personnel responding from the Southeast District, personnel would be immediately mobilized from throughout the Colonial system.

Upon arrival onsite, Colonial would also work closely with officials from the EPA Region IV and the North Carolina Department of Environment and Natural Resources (NCDENR). As a first course of action, a joint review of Colonial's response maps will re-identify natural resources, industrial, and residential developments threatened by the spill and which countermeasures would prove most effective in protecting these resources. This activity includes protection, if possible, of endangered species, wildlife areas, and public recreation areas. The U.S. Fish and Wildlife Service office can provide information regarding known endangered species in the vicinity.

For a tank failure occurring as described above, it would be clear from the outset that a prompt response from the entire area emergency response team would be appropriate. Response personnel from the Gulf Coast District, the Northeast District, and the Atlanta Response Team would be mobilized. This would result in an initial compliment of approximately 30-40 Colonial personnel onsite within the first five hours of the response with an additional 5-10 support personnel mobilized from the Corporate Headquarters. This compliment would be fully qualified to fulfill the various functions identified in the incident Command System in Section 4 of this Manual. Colonial would also make back up and relief personnel available from other districts for a spill of this magnitude. Colonial contracted OSRO's would be mobilized as necessary.

Issues Confronting Local IC:

Lack of precise volumes released from tank, volumes retained within dikes, and retention pond.

Weather.

Not all facility personnel will be immediately available.

C. Countermeasures

Notification

Upon discovery of the release by operations personnel at (b) (3), (b) (7)(F) [redacted] the notification of Colonial personnel, contract responders, and governmental agencies would proceed in accordance with Section 2 of this Manual. This would include immediately activating the Colonial Emergency Response Plan and designating an IC to mobilize sufficient resources and coordinate with governmental agencies including the Federal On-Scene Coordinator (FOSC).

Strategies

Decisions that must be made are:

Evaluate the actions that have been taken within an ICS structure and ensure that all work is completed in a safe manner considering fire and explosion hazards associated with fuel oil and the current weather conditions.

Determine Colonial resource needs and availability within the Southeast District, the adjacent Gulf Coast and Northeast Districts, and Atlanta office personnel. Mobilize these resources in a timely manner to fulfill the 12 and 24 hour planning cycles.

Locate additional areas for containment/recovering and protection besides those noted on Colonial response maps (SLD-1-11 and SLD-1-7).

Determine the number of additional spill response personnel needed for oversight, cleanup, containment, and countermeasures.

Determine how much equipment will be necessary for containment, countermeasures, and cleanup actions.

Decide who will provide the additional equipment.

Prioritize response efforts for environmentally sensitive areas.

Contractors

As part of the initial Notification Procedure, key area contractors would be notified within the first hour of the response. For the given scenario a number of spill response contractors and tanker truck contractors would be mobilized and asked to send trained personnel and equipment to the closest staging location in anticipation of a spill clean-up operation. Using the “35-mph” rule for response contractors and allowing an additional hour for equipment loading, it is estimated that most these resources would arrive within two to six hours of discovery.

The following Oil Spill Response Contractors and other responders would be mobilized (response time):

Marine Spill Response Corp. (MSRC) – multiple locations (2 - 12 hrs.)
Hepaco, Inc. – Raleigh, NC (3 hrs.)
Clean Harbors Environmental – North Carolina (3 hrs.)

The following Preventative Maintenance Contractors would be mobilized to assist in response and recovery efforts and pipeline repair:

ED Wallace Construction – Charlotte NC (3.5 hrs.)
Central Virginia Maintenance – Buckingham, VA (4 hrs.)
L.E. Bell Construction – Heflin, AL (11 hrs)

This action could provide at least 200 HAZWOPER trained personnel as labor for the response operation, as well as boom, skimmers, earth moving equipment, pipeline repair equipment, and other appropriate

equipment for response operations.

Governmental Agencies

In accordance with the initial Notification Procedure of this Manual, the following Federal and State Agencies would be notified within one hour of discovery:

National Response Center
EPA Region IV
NC DENR
NC State Police and Local Fire Department
North Carolina Emergency Response Commission
Guilford County Local Emergency Planning Committee

As the response progressed and additional information as to the specific location of the emergency was discovered and/or reporting requirements were met, the following agencies would be directly contacted:

U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA)

Subsequent communications between specific Colonial response team members and these agencies would flow freely on an individual basis as is necessary.

D. Isolation

The affected tank would be isolated by Colonial's operations personnel by closing the manifold valve to [redacted] after residual product remaining in the tank has been transferred to another tank. This action would minimize the volume of additional product that could be released into the environment. This action would isolate the tank and residual product to the greatest extent possible.

An immediate assessment will be conducted to determine if an explosive atmosphere exists within the facility. The spill site location is a considerable distance away from occupied buildings and the access road for [redacted] In addition, the direction of spill travel is away from the facility and distillate products have a relatively high flash point of ignition. Therefore, for the purpose of this scenario, it is assumed that the entrance road to the facility will remain open, and it would be unlikely that evacuation of the facility would be necessary.

E. Site Assessment

Upon arrival at the area affected by the release, the first action by Colonial's Emergency Response Team (employees and contractors) would be to assess the magnitude of the emergency in order to prioritize subsequent response actions and allocate available resources accordingly.

Colonial employees or contractors would immediately begin monitoring explosive and oxygen concentrations in the atmosphere upwind and close to the spill site (if possible considering worker safety) to establish appropriate hazard zones in accordance with OSHA regulations. As the leading edge of the spill progressed away from the initial site towards the tributary of [redacted], further air monitoring would be required at all points where there would be a potential for public contact with the spill. Access to these areas would be controlled accordingly.

Colonial Pipeline Company

WORST CASE DISCHARGE – SCENARIO

Spread of the spill off Colonial property would be towards the south into the tributary of (b) (3), (b) (7)(F) [redacted]. It is reasonable to assume that a significant portion of the spilled volume would not escape secondary containment and that a significant volume would be contained within the tank dike. Due to the nature of the tank failure, and for the purposes of this exercise, it is assumed that a significant amount of product ((b) (3), (b) (7)(F) would actually spill into this tributary. It is very difficult to accurately estimate what quantities of product would escape containment and flow away from the facility.

It is difficult to estimate the amount or speed at which the released product would migrate downstream. The crossings under (b) (3), (b) (7)(F) [redacted] and the two lakes constructed on the tributary, upstream of the confluence, would retain a significant amount of the product and would facilitate the deployment of equipment and containment activities.

For purposes of this scenario, it is assumed that the leading edge of the spill would reach (b) (3), (b) (7)(F) [redacted] (.4 miles down gradient of the tank) within five minutes of the release.

The creek is a small, low gradient waterway with an estimated average channel velocity of approximately one mile per hour or less. Due to the volume of the released product and the size of the stream, it is assumed that the initial velocity of product within the stream would be much higher than one mile per hour. The following landmarks have been identified downstream of the release entry point:

Approximate distance downstream from [redacted]	Minutes:	Item:
0.4	5 min	(b) (3), (b) (7)(F) [redacted]
1.0	20 min	
1.3	140 min	
1.6	160 min	
2.7	220 min	
4.0	300 min	
5.0	540 min	
6.0	780 min	

For the purposes of this discussion, it is assumed that assessment would begin approximately 20 minutes after the release occurred.

Initial site assessment would reveal that:

A large volume of product was pooled on the ground inside the dike for (b) (3), (b) (7)(F) [redacted].

A significant volume of fuel oil has migrated into the adjacent dike to the north.

A large amount of fuel oil has escaped the dike area and flowed overland into the small stream at a point downstream of the lake. The leading edge of the released product has left the facility and reached the (b) (3), (b) (7)(F) [redacted]

An initial high priority activity would be to discuss with local emergency response agencies the need for immediate closing of (b) (3), (b) (7)(F) [redacted] and the potential for evacuation of businesses and residents downstream to (b) (3), (b) (7)(F) [redacted] Colonial

emergency responders will begin initial assessment/reconnaissance of the area and the information gathered will be used to assess the need for evacuation of industries and residences along the [redacted] (b) (3), (b) (7)(F) [redacted] Reconnaissance will be conducted by foot, vehicle, and helicopter (during daylight hours). It is anticipated that local law enforcement and fire department personnel would implement evacuations and road closures as deemed necessary.

Because the purpose of this exercise is to discuss a scenario where a large volume spill occurs, and a fire event would reduce the total volume of spilled product, it is assumed for the purposes of this discussion that no accidental ignition of the spill occurs.

Concurrent with actions to ensure the immediate safety of the general public, efforts would begin to stem the spread of the release and to minimize the release volume. Response resources would be positioned and deployed at previously identified containment and recovery points. In addition, reconnaissance personnel would locate additional containment and recovery points based upon actual conditions and communicate these locations to Planning.

Containment/Recovery sites would be established at the lake downstream of (b) (3), (b) (7)(F) [redacted] at the head of (b) (3), (b) (7)(F) [redacted], and at the (b) (3), (b) (7)(F) [redacted] Protective booms would be deployed around the (b) (3), (b) (7)(F) [redacted] and other sensitive areas on (b) (3), (b) (7)(F) [redacted]

In conjunction with these activities, Colonial emergency responders would begin monitoring hazardous atmosphere levels (particularly explosive atmosphere) at the spill site to establish an appropriate hazard zone. Air monitoring would be required at all points where public contact with the spill was likely and where deployment of resources would be necessary. Access to these areas would be controlled accordingly.

F. Containment and Collection

Several factors would hamper efforts to collect and contain released product during the early stages of this release. The combined effects of continuing rain, darkness, and higher flow conditions in the creek would make spill reconnaissance, assessment of suitable collection points, and deployment of equipment hazardous and difficult. Further, historical cases of pipeline releases under similar conditions has shown that: 1) as the release travels downstream, the product tends to become agitated by the floodwaters to the point where it is indistinguishable from floodwaters heavy with sediments, and 2) the deployment of boom across even a moderate-sized stream during flood conditions is often only marginally effective in trapping product due to splash-over and underflow caused by swift currents. Spill barges and deployment boats would possibly be used for recovery efforts in the (b) (3), (b) (7)(F) [redacted].

Product will enter the tributary of (b) (3), (b) (7)(F) [redacted] along the east bank and immediately be transported downstream towards (b) (3), (b) (7)(F) [redacted]. This area is part of Colonial's property. (b) (3), (b) (7)(F) [redacted] and the two culverts under it will help impede the flow of the product. The product will cross the road and continue through the heavily vegetated channel and will enter the man-made lake north of (b) (3), (b) (7)(F) [redacted] The lakes at both sides of this crossing are accessible. Since the flow at this point is slower, shore-to-shore boom placement, the blocking of the spillways, and product containment activities can be conducted without the need to improve equipment access to these areas.

Harbor boom would be deployed in this area. Deployment would be accomplished by utilizing small watercraft and shoreline personnel. Maintenance and adjustments will be conducted as necessary. Skimmers would also be utilized at this location along with direct recovery vacuum equipment and

pumping equipment.

Frac tanks would be set up to serve as oil water separators. The tanks could be used to provide "float time collection" prior to a sufficient number of tanker trucks arriving and during the ongoing shuttling of tankers throughout the first 90% of recovery efforts. Additionally, these tanks could be used to maximize recovery efforts in the first few hours by the use of high-volume non-specific recovery pumps. The tanks will allow large volumes of water to be removed from recovered oil common to the use of these non-specific pumps.

Approximately .25 miles downstream of the second man-made lake south of (b) (3), (b) (7)(F), is the confluence with (b) (3), (b) (7)(F) From this point to the crossing with (b) (3), (b) (7)(F) and downstream to the head of (b) (3), (b) (7)(F) the stream is narrow and the flow velocity is estimated at one mile per hour or less.

At the upper end of (b) (3), (b) (7)(F) provides access to a large cleared area that will facilitate the establishment of a containment/recovery site utilizing multiple strands of boom deployed across the creek, skimmers, vacuum recovery, pumping equipment, and frac tanks for temporary storage. The site is accessible to tanker trucks which would be employed to transport recovered product from the frac tanks back to storage at (b) (3), (b) (7)(F)

Downstream on (b) (3), (b) (7)(F), skimming barges with product recovery storage capacity would be used to recover product that escapes the containment booming at the (b) (3), (b) (7)(F).

An additional containment/recovery site would be established at the (b) (3), (b) (7)(F) bridge crossing of (b) (3), (b) (7)(F) Truck access appears reasonable and is assumed to be readily useable both from deployment and recovery efforts with no immediate improvements required. Multiple strands of boom would be deployed upstream and downstream of the bridge. Frac tanks, skimmers, vacuum recovery, and pumping equipment would also be deployed at the site.

As containment actions are being implemented, it will become necessary to evaluate on-going logistics for maintaining control of the plume, sustaining recovery actions underway, and implementing contingency measures to limit future exposure or release.

Maintaining control of a plume involves careful consideration of oil collection rates and determining if such collection rates are exceeding recovery rates. Adjustments in increasing recovery equipment is the first priority. However, it is possible that timeline projections may prove that additional deployment of equipment would need to take place.

Sustaining recovery actions involves having a place to store recovered oil in a location or locations of sufficient volume to keep up with recovery. (b) (3), (b) (7)(F) would have adequate capacity for this operation. In addition, temporary storage tanks (frac) could be mobilized as required.

Also important to sustaining recovery is personnel rotation and adequate lighting. Generally, 30% of the work force should be sent back after the first six hours in order to preserve recovery rates on a 24 hour basis. No more than 16 hours should be worked by any member of the Response Team. This is especially important for the managers who are involved in logistics and coordinating response activities. Adequate turn over meetings and supervisory overlap times are critical in maintaining recovery rates.

Contingency measures include installing shoreline protection boom to prevent the accumulation of oil in inaccessible areas and to mitigate the spread of further contamination in low-lying areas which pose

difficulties for the implementation of recovery efforts. All water intakes for commercial and industrial use should also have boom protection. Marinas, docks, landings, etc., all represent a significant secondary risk to increasing cleanup effort and should be protected.

Extensive efforts would be made to identify several locations where the release could be contained and collected, using the available resources identified above. Due to the health hazards associated with distillate products, containment efforts would initially be focused at downstream locations prior to the arrival of the leading edge of the product.

Information should continue to be gathered throughout the incident for operational purposes. This information would be utilized in developing the 12 and 24 hour plans. Some of this information might include:

Status of countermeasures completed by Colonial's OSROs and support personnel.

Amount of cleanup and containment equipment on scene.

Amount of additional equipment needed and where it will be obtained.

Prioritize environmentally sensitive areas for protective measures.

Safety.

Volume of product recovered at each collection point.

Potential NRDA impacts/data needs.

Problems that could be encountered include:

Unsafe working conditions due to hydrocarbon hazards and weather conditions.

Flooded waterways.

Miscommunications.

Spill volume is not accurate due to inability to immediately determine the amount of fuel oil released from the tank and the volume contained within the tank dikes and retention pond.

Weather information is not accurate.

Health Considerations.

Contractor and Agency access to the facility, recovery points, and areas along the watercourses.

Cleanup operations should involve all local, state, and federal agencies, the State and Federal Fish and Wildlife Agencies, and technical expertise should be solicited from USCG Strike Team.

Methods of containment, countermeasures, and cleanup:

Mobilize personnel, vacuum trucks, frac tanks, skimmers, booms, boats, absorbents, temporary storage,

light towers, aircraft/surface surveillance, and debris disposal.

Deployments at (b) (3), (b) (7)(F) [redacted]. Locate additional areas for containment and recovery.

Deploy boom to protect critical areas and recovery equipment as per reconnaissance input.

Establish unified incident command center at (b) (3), (b) (7)(F) [redacted]

Safely recover and contain fuel oil at collection and recovery points recognizing health and other safety hazards.

Clean stream and riverbanks as necessary/appropriate.

Coordinate disposal and monitor sites.

Collection of oil-laden debris.

G. Resources

Equipment: In the initial stages of the response, equipment would be obtained from Colonial contracted OSROs resources staged within the Southeast District and pipeline maintenance contractors. These resources would be deployed for containment measures at (b) (3), (b) (7)(F) [redacted] and (b) (3), (b) (7)(F) [redacted].

At the same time, selected Colonial and contractor resources would be mobilized to secure downstream water intakes.

Containment booms would be used for containment of escaped petroleum, as well as protection of ecologically sensitive areas including local water intakes for drinking water treatment plants.

Resources would report to the staging area identified by the incident command center for given assignments. All responders should have some type of communication and proper identification. They will be given a safety briefing and logged in on a deployment board. Once communication is established, each team will be dispatched to predetermined locations(s) with general deployment instructions and instructed to check in upon arrival with a situation report.

The following represents an approximate list of Colonial and response contactor personnel and equipment that could be employed on this spill:

HAZWOPER trained supervisory and technician level personnel.
Vacuum trucks.
Containment booms.
Boom deployment boats.
Miscellaneous air monitoring equipment, e.g., OVMs, OVA, CGIs, etc.
Absorbent booms, pads, and sweep as needed.
Tanker trucks.
Barge-mounted modular skimmers.
Drum, weir, and other light oil style skimmers.
Diaphragm pumps and air compressors.

High volume 4" – 6" pumps.

Colonial would obtain the following equipment on an as-needed basis:

Additional vacuum trucks.
Frac tanks.
Skimming equipment.
Earth-moving equipment on an as-needed basis, i.e., excavators, bulldozers, etc.

Personnel – All personnel listed in the Southeast District Emergency Response Plan would be mobilized. Additional personnel would be mobilized from the adjacent Gulf Coast District, Northeast District, and Atlanta Office.

H. Resource and Procurement

Contracted OSRO's will provide a significant portion of primary response equipment utilized in the response effort.

Response time for all resources:

Colonial personnel on scene for containment would take action immediately. District response personnel and OSROs would be onsite within 2 to 12 hours.

Other District response teams, additional main office personnel and contractors.

Northeast District (Response Zone 804) including tanker trucks and USCG-approved OSROs and contract personnel: 6 to 18 hours.

Gulf Coast District (Response Zone 801) including tanker trucks, USCG-approved OSROs and contract personnel: 24 hours.

NCDENR response team: 3 hours.

USCG Strike Team: 6 hours.

In summary, sufficient contracted USCG-approved OSROs and trained Colonial response personnel for a sustained response will arrive on site within the required tiered response times.

Potential Shortfalls

Underestimation of surface water flow impact and weather effect rendering boom deployment and skimmer operations ineffective.

Short-term shortage of HAZWOPER trained personnel.

Potential vapor and health hazards preventing effective recovery of fuel oil.

Minimum Cleanup Time

One week for free product recovery.

Four to six weeks for stream and riverbank/critical areas.

Seven to twelve weeks for final cleanup.

Greater than eight weeks for NRDA related activities.

I. Site Discontinuation

Criteria for terminating the cleanup operation will vary for each incident. Consultation between the agencies involved or affected in the specific area is required prior to cleanup termination.

In general, response operations to contain, recover, and mitigate would continue until both Colonial and the various appropriate governmental agencies were satisfied that further actions were unnecessary.

Colonial Pipeline Company
MINIMUM RESPONSE RESOURCES

This section includes information on resources needed to respond to a release of product or an emergency.

Included are the resources available from within the District, Oil Spill Response Organizations (OSROS), other contractors, equipment, and vendors.

The Project Leader is responsible to ensure that the OSROS included in the plan meet the U.S. Coast Guard qualification requirements and that the contact name, address, and phone numbers are correct. This information will be reviewed on an annual basis. In addition, any non-U.S. Coast Guard approved OSRO (non-OSRO) will be required to provide the Project Leader with semiannual certifications that their spill response equipment is properly maintained. The Project Leader will retain these certifications.

Colonial Pipeline Company

MINIMUM RESPONSE RESOURCES

Minimum Resources for the Worst Case Discharge [redacted]							
Worst Case Discharge: [redacted] - [redacted]							
This is a Low Volume Area							
		Quantity Available By Source			Quantity Available on Site by Time		
Resource	**Quantity Needed**	**OSRDs**	**Colonial**	**Others**	**Tier 1**	**Tier 2**	**Tier 3**
Boom - 12" skirt	8000'	8,000'			8,000'		
Boom - protective booming 6-12" skirt	10,000'	10,000'			10,000		
Absorbent Boom	15,000'	15,000'			5,000	15,000'	
Skimmers – drum or floating weir, 20 – 100 gpm	30	30			30		
Diaphragm pumps 2-inch/3-inch	50	50			50		
Centrifugal pumps 4-6-inch	10	10			10		
Frac tank - 20,000 gal	30	30			15	30	
Personnel to deploy/manage equipment	315	200	40	75	150	315	
Tanker Trucks	50			50	25	50	
Vac Trucks	10	10			10		
Skimmer barges	2	2				2	
Boats 16-25 foot 25 HP min	10	10			10		
Boom - 12" skirt	8000'	8,000'			8,000'		
Specified Tier Times							
On-scene arrival times:							
	High volume areas	**Low volume areas**					
Tier 1	6 hrs	12 hrs					
Tier 2	30 hrs	36 hrs					
Tier 3	54 hrs	60 hrs					

Colonial Pipeline Company
NOTIFICATION & MOBILIZATION PROCEDURES

Should an emergency occur, it becomes the responsibility of the employee who first becomes aware of an emergency that is responsible for obtaining pertinent information and initiating the notifications as indicated on the "Emergency Notification Flowchart" found in Section 2.03 of this plan. The employee should continue to follow the notification flowchart until a supervisor or manager relieves them of that responsibility.

DEFINITION OF AN EMERGENCY

An emergency is an event that requires immediate response to mitigate the problem or conduct subsequent investigations. An emergency may involve:

Injuries to an employee, contractor, or the general public.
Significant property damage.
Spilled product, a fire, or explosion.
Local media attention.
Required notification of local, state, and/or federal regulatory agencies.

INFORMATION TO COLLECT

It is important to obtain pertinent information regarding the emergency. The Initial Spill Information Report contained in Section 3.01 of this plan should be used to collect and document the desired initial information. Field operators who receive pertinent spill related information may also document such information in the narrative log.

TIME DESIGNATION

Any time designation established during verbal communications, emails, text messages, documentation, etc. refers to local time for the location of the incident. This should be clearly noted in all documentation (i.e., 1:34 pm local time).

INITIAL NOTIFICATION PROCEDURES

Agency Notifications

It is imperative that timely and proper agency notifications are made. This includes notification of local police and fire departments. Personnel responsible for making the required agency notifications are identified in the Emergency Notification Flow Chart. An explanation of notification requirements of Federal, State, and Local agencies in the event of a petroleum release and/or emergency is located in Corporate Procedure 30. A list of other Federal, State, and Local agencies that may be of assistance is located in Section 5.04 of this plan.

Immediate NRC Notification

Immediate notification to the National Response Center (NRC) is required for certain circumstances in accordance with 49CFR 195.52(a). These circumstances are if the event:

Caused a death or a personal injury requiring hospitalization;
Resulted in either a fire or explosion not intentionally set by the operator;

Caused estimated property damage, including cost of cleanup and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding $50,000;
Resulted in pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines; or
In the judgment of the operator was significant even though it did not meet the criteria of any other paragraph of this section.

INTERNAL NOTIFICATIONS & ACTIVATION OF SPILL MANAGEMENT TEAM(S)

The "Emergency Notification Flowchart" posted at each Colonial facility contains emergency telephone numbers for key personnel to initially notify. It is the responsibility of the Incident Commander or his/her designee to decide whether or not to mobilize the District Spill Management Team and/or Spill Management Team. The Spill Management Team is activated for significant spills or emergencies. A roster listing the members of the Spill Management Team is contained in Section 5.01 of this plan.

For significant events, the Incident Commander should discuss with the Crisis Management Team Leader the potential need to alert the Crisis Management Team. The Crisis Management Team Leader decides if the Crisis Management Team is to be activated.

Group Notification System

Personnel with emergency response roles are activated using a group notification system. The following two Group Notifications are used:

Group 4: Notifies Spill Management Team and other key personnel for significant spills/emergencies.
Group 8: Notifies District personnel with emergency response responsibilities.

The groups are initially notified using a simultaneous combination of:

Text messaging to cell phones.
Emails to PCs.
Phone calls to cell phones and office phones.
Messaging to the MIR3 phone application.

Group 4 notifications are issued by the Control Center (at least initially). Group 8 notifications are normally originated by district personnel. Initial group notifications may be short in content due to limited information being available at the time. They primarily serve as an alert. Follow-up group notifications should be made within an hour of the first alert to provide additional direction or the possibility of a stand-down.

Group 4 and **Group 8** responders are to follow the instructions contained in the text message. Responders with designated ICS positions are to connect with their section or unit leader for specific instructions on where and when to report. Section and unit leaders will assemble their staffs.

INSTRUCTIONS FOR SENDING GROUP NOTIFICATIONS

Colonial Pipeline Company

NOTIFICATION & MOBILIZATION PROCEDURES

Group notifications are sent using MIR3 Notification System using the following steps:

Go to the MIR3 Website and log in:

[redacted]

Login ID: Your Colonial email address **with a "." instead of the "@"**

Example: Login: [redacted] use dot colpipe dot com)

Default Password: [redacted] his should be changed later using the web portal.

The initial Screen will be in the horizontal [redacted] Tab as a default. Click the **Show All** option along the left margin.

Select the appropriate NOTIFICATION TEMPLATE from the list shown. Only the templates you have access to will be listed.

Select the **COPY** tab in the bottom right of the page (you may need to scroll).

Rename the notification in the **NEW TITLE** window so you do not overwrite the existing template.

Colonial Pipeline Company
NOTIFICATION & MOBILIZATION PROCEDURES

Use the following nomenclature to rename the notification title as shown below:

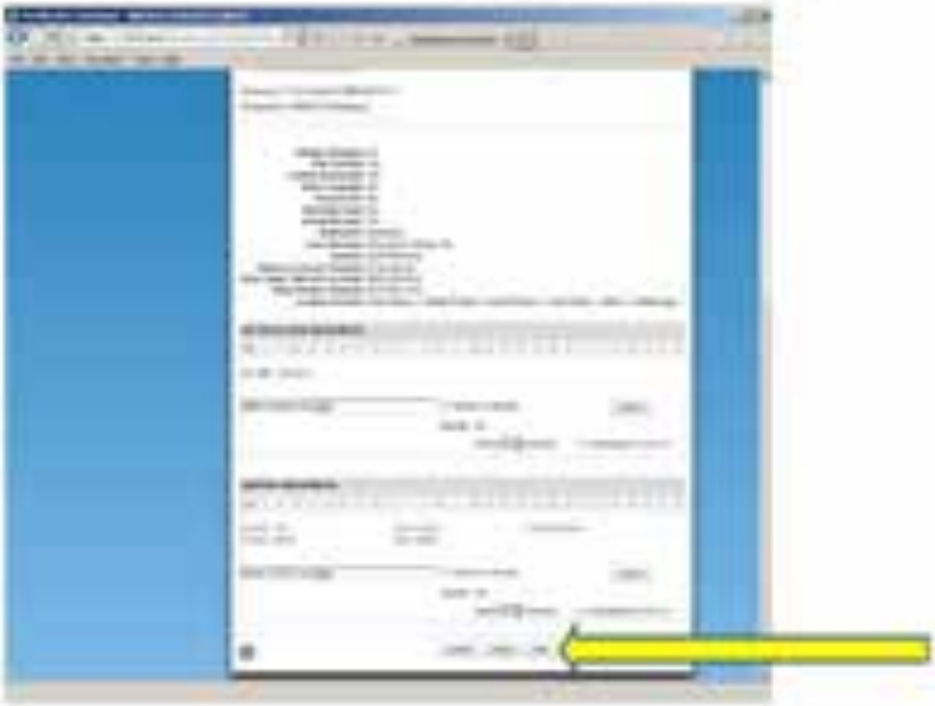
Date (YR MO DA) _ Incident/Drill Location
Example: 20140407 _ San Jacinto Exercise

Select the Appropriate Division from list in the drop down Box:

SMT Group 4
CMT
Gulf Coast District
Southeast District
Northeast District

Then select the **SAVE** tab in the lower right corner of the screen.

Select **EDIT** tab in the lower right corner of the notification you just saved (will be in your active screen).



Use the template language in the **Message Window**, providing specific incident information where indicated by "<<_____>>". You can also edit/add/remove the **Response Options** where shown, but this is not necessary. Then select the **NEXT** tab.

Ensure the proper group to be notified has been selected (select the **All Checked** tab to view). All the templates have the appropriate group pre-selected so this should be a check step. Additional responders can be added in this window if needed. Select the **NEXT** tab to advance.

Ensure the proper individuals to receive notification reports have been selected (select the **All Checked** tab to view). All the templates have the appropriate report recipients pre-selected so this should be a check step. Additional report recipients can be added in this window if needed. Select the **SAVE** tab to complete editing the notification.

Select the **SEND** Tab in the lower right corner. A window will follow asking you to confirm sending the notification. Select yes and the notification will be sent out.

Message Content

The initial message should provide the following information (if available):

Indication of whether the release is suspected or confirmed.
General magnitude of release (no volume estimate should be included).
Type of product involved.
Affected pipeline(s) and location of nearest city/airport.

Note that there is a limit in the number of characters that can be included per text message. It may require multiple text messages to convey the required information.

Follow-up notifications may be used to provide more information as it becomes available, such as command post and staging locations.

ALTERNATE NOTIFICATION METHOD FOR GROUP NOTIFICATIONS

In the event the MIR3 notification platform is unavailable for sending the Group Notification(s) as stated above, notification will be made by using the ICS phone tree. This phone tree follows the ICS structure outlined in Section 4.02.

The process of beginning this type of notification begins with the Incident Commander contacting the Documentation Unit Leader. The Documentation Unit Leader will then contact each identified Section Chief. The Documentation Unit Leader will confirm with the Incident Commander that all Section Chiefs have been notified.

After each Section Chief is contacted by the Documentation Unit Leader, it is the responsibility of the Section Chief to initiate the notification process in their line of command by contacting the first individual listed in their line of command on the ICS. The last individual in the line of command will contact their section chief to notify them the line of communication has been completed.

NOTE: If at any time during the notification process, an individual is unreachable, the person attempting to make contact, should skip this individual and contact the next individual in the IC structure in order to continue the notification process. The person who is responsible for contacting the unreachable individual should continue to make contact until successful or contact the Section Chief for guidance as to continue attempting notification or select another individual to fill the role.

If the Spill Management Team is to be notified, the Incident Commander will contact the CCOM on duty. The CCOM will coordinate contacting each Spill Management Team Member individually.

Communication via the phone tree can be made by either text messaging or calling each individual. If text message is the chosen means for the notification, the recipient of the text notification shall confirm receipt of the text message to the sender (Please note that if text messaging is chosen, text messages are limited to 100 characters and it may take several text messages to communicate the required information).

It is the responsibility of the individuals identified in the IC structure to maintain current contact information for the individual(s) they are responsible for contacting.

NOTIFICATION DOCUMENTATION

All agency notifications must be documented. The time and date of such notifications shall be entered onto the Break and Leak Report (Form 3014) prepared for the spill. The Control Center typically notifies the National Response Center (NRC) when such notifications are necessary. This notification is normally made via the internet. A copy of the completed document shall be kept on file.

Records should be kept of internal notifications. Field operators may document initial notifications made per the Emergency Notification Flow Chart into the narrative log. The date/time that Group 4 and/or 8 notifications are sent, the content of the messages, and a listing of availability of responders are to be documented.

SPILL MANAGEMENT TEAM MOBILIZATION

It is important to note that the Group 4/Group 8 notification is an alert mechanism. Individual Spill Management Team Section and Unit Leaders will assess incident needs, priorities, and resource availability within their respective functional teams. They will determine and communicate to their team: 1) who should deploy to the command post; 2) who should deploy to the hotel (for night shift duties), and 3) who is to be placed on standby.

Within one hour of the initial group notification, a conference call should be initiated by the Day Shift Planning Section (Chief or Deputy) and led by the Incident Commander with participation by select District and Spill Management Team members. Announcement of the time of the call, conference telephone number, and conference code information will be made via a separate notification. The conference call should last no longer than 20-30 minutes.

Participants

All Group 4 Spill Management Team Incident Commanders
Local Operations Manager
Day shift Safety Officer
Day shift Public Information Officer
Day shift and local Liaison Officers
Day shift Section Chiefs (Operations, Planning, Logistics, and Finance)
Adjacent district Operations Chief (nearest to spill location)
Initial (local) Planning Section Chief
Day shift Resource Unit Leader
District Documentation Unit Leader

Agenda

Roll call, ground rules.
General magnitude of the spill and current state of the response.
Initial action plan.
Identification of any significant gaps of concern.
Confirmation that immediate external resources (OSROs and critical consultants) have been mobilized.
Confirmation that required agency notifications have been made.
Location of incident command post and staging.
Identify Incident Management Team Command Staff and Section Chief positions and ETAs. Confirm Command Staff and Section Chiefs are assembling their organizations (DAY and NIGHT). Identify

significant personnel gaps. Set the shift schedule for the next work period and the time for the next work period to begin.
Determine if expedited travel (via charter service) is required for critical positions.
Set the expectation for staggered deployment (if needed) to ensure immediate outreach and integration with responding agencies, public information, and other functional areas.

Conference Call Notes

Following the call, the Documentation Unit Leader will send a text message to the Group 4 and affected district Group 8 distributions alerting them to an upcoming email containing the notes from the conference call. After emailing the notes, they will be uploaded to the emergency response SharePoint site and/or entered into the Incident Event Log in the IAP software.

IMMEDIATE MOBILIZATION FOR CERTAIN RESPONDERS

Certain non-district resources are considered time critical and shall immediately prepare to mobilize to the spill site upon receiving a Group 4 notification (except such notifications that are clearly prefaced as "for informational purposes only"). These time critical resources are:

Public Information Officer
Government Liaison
ICS Consultant Team (The Response Group)
3rd Party Monitoring Contractor Team

The Planning Section Chief is responsible for confirming immediate mobilization of the ICS Consultant. The Finance Section Chief is responsible for confirming immediate mobilization of the 3rd Party Monitoring Contractor.

During the 1st hour conference call, the Incident Commander may elect to cancel the mobilization of these resources.

RESPONDER MOBILIZATION AND TRANSPORTATION

Personnel assigned to the incident command post are to report to the command post. All other personnel are to initially report to staging.

Responders are to arrange for their own transportation to the site. If air travel is required, assistance in making reservations is available from Colonial's corporate travel agent:

Normal Business Hours:
678-762-2425 (in-house) or 404-591-7120
Toll Free: 800-878-2677 (Age of Travel)

After Hours:
855-512-7952

On-line (Concur):
https://www.concursolutions.com/travelhome.asp

Expedited Mobilization via Charter Air Service

Depending on the specific incident needs, situation, and priorities, the Incident Commander will determine if expedited mobilization for critical positions will occur using charter air service. Once activated, the Logistics Section will coordinate with the Planning Section Chief (or designee) to coordinate the positions to be filled.

Below are the priority positions that would be considered for expedited mobilization from Atlanta.

Atlanta Area/PDK

Planning Section Chief
Deputy Planning Section Chief
Liaison Officers
Public Information Officers
Environmental Unit Leader
Safety Officer
GIS Specialist
Operations Staff

In addition, "milk runs" may be made for other select positions from along the pipeline system (IC, OSC, DOCL, SITL) depending on location of the incident relative to where these resources are located at the time of the incident.

For example, a **South to North** flight may originate from the Houston/Beaumont, TX area with potential stops in Baton Rouge and Collins/Hattiesburg, MS. Similarly, a **North to South** flight may originate in the Philadelphia, PA area with potential stops in Richmond, VA and Greensboro, NC.

Should chartered air travel be warranted, contact information for such services in the Atlanta area is provided in Section 5.11 of this plan.

Colonial Pipeline Company

COMMUNICATION METHODS & EQUIPMENT

EMERGENCY NOTIFICATION EQUIPMENT AND METHODS

Colonial uses computers, traditional phones, blackberries, cell phones, and/or pagers as emergency notification equipment. Notifications are sent via text messaging, email, voice calls, and/or pagers as explained in Section 2.01 of this plan.

TIME DESIGNATION

Any time designation established during verbal communications, emails, text messages, documentation, etc. refers to local time for the location of the incident.

SHAREPOINT

A SharePoint site has been established for use during an incident response. The site provides a resource for sharing information about the incident with the appropriate response personnel. Upon notification of an emergency response, the Environmental Coordinator will begin to post relevant information (i.e. location of IC, Staging, manage security levels, etc.). Incident responders will have access to the site for posting relevant information.

The designated SharePoint site can be accessed by first going to the Emergency Response Plan site. Next, go to the quick launch toolbar on the left hand side of the screen then click on the name of the incident.

EMERGENCY VOICE AND COMPUTER COMMUNICATIONS EQUIPMENT

Colonial has available the following telephone communications equipment that can be used while responding to an emergency:

Traditional Public Switched Telephone Network (PSTN) land lines.
Cell phones including AT&T/Cingular, Sprint NexTel and Verizon (depending on area code).
Cellular data cards.
NexTel Two-Way Off-Network 5-mile Radio Phones.
Satellite Phones.
Dispatch voice circuits.

EMERGENCY COMMUNICATIONS EQUIPMENT LOCATIONS

Traditional land lines where available.
Over 600 cell phones are distributed throughout the company.
Over 200 cellular data cards distributed throughout the company.
Over 100 NexTel two-way radio phones are distributed throughout the company.
Over 30 satellite phones are strategically distributed across the pipeline including one for most tank farms, one for each Director of Operations, several in the IT ER kit, and others in key locations.
Dispatch voice circuits are used for pipeline operators and could be used for ER if needed.

IT EMERGENCY RESPONSE KIT

The Communications Leader maintains an ER kit which includes satellite phones and accessories.

EMERGENCY USE COMMUNICATIONS PROGRAMS

Colonial Pipeline Company

COMMUNICATION METHODS & EQUIPMENT

The National Communications System (NCS) offers a range of National Security and Emergency Preparedness (NS/EP) communications services that support qualifying federal, state, local, and tribal government, industry, and non-profit organization personnel in performing their NS/EP missions. These services ensure a high probability of call completions in both wireline and wireless portions of the PSTN during emergency situations when there is extreme network congestion.

Government Emergency Telecommunications Service (GETS)

GETS provides emergency access and priority processing in the local and long distance segments of the public switched wireline network. Colonial received numerous GETS identification cards. IT maintains an updated list of Colonial responders with GETS cards.

GETS should only be used while performing duty in a NS/EP role during an emergency after experiencing call congestion or blockage. From a touch-touch or cell phone, GETS is accessed by dialing 1-710-627-4387. When you hear the tone, enter your 12 digit PIN. Listen for the prompt and then enter the 10 digit destination number. From an Iridium satellite phone dial 00-1-710-627-4387 and press send. When you hear the tone, enter your 12 digit PIN. Listen for the prompt and then enter the 10 digit destination number.

Note that GETS calls cannot be made to toll free phone numbers. GETS user assistance is available 24 hours a day at 800-818-4387 or 703-818-4387.

Wireless Priority Service (WPS)

WPS provides priority cellular network access that works complimentary to GETS to ensure a high probability of call completions in both the wireless portions of the PSTN. IT has implemented WPS for many cell phones and will continue to review and optimize the list of active WPS cell phones.

WPS is activated by dialing *272 prior to the destination number. If a cell phone is set up with WPS and you receive an “all circuits are busy” response, you can dial *272 code plus the phone number you wish to connect with to get priority service for your call.

Telecommunications Service Priority (TSP)

TSP provides service vendors with a Federal Communications Commission (FCC) mandate for prioritizing service requests by identifying those data and voice services critical to NS/EP. This priority only applies during the restoration of specific existing Colonial network services such as most of Colonial’s AT&T Frame Relay wide area network and some voice circuits.

IRIDIUM SATELLITE PHONE PROCEDURES

The Iridium satellite telephones operate through a network of 66 low-earth orbiting (LEO), cross-linked satellites. The Iridium network is the largest commercial satellite constellation in the world. Colonial’s Iridium satellite phone network is a combination of docked, hard-wired installations at key pipeline locations, and hand-carry units for emergency response use. The docked satellite phones are also wireless/portable and can be taken anywhere (similar to the hand carry units). All Colonial satellite phones are compatible with U.S. Department of Homeland Security’s WPS and can be used with your Colonial issued GETS card.
The Iridium satellite phones are simple to use:

You must be outside, with an unobstructed view of the sky (unless you are using a docking station or other exterior antenna configuration).
Turn the unit on; raise the integrated swivel antenna; the unit will register with the Iridium network.
Wait until you see a signal strength of at least three bars.
Dial your number; 001+ Area Code + Number; (Note: The 001 prefix is required for hand-carry units; it is NOT required if the unit is docked in a hard-wired configuration! Once a unit is docked, only standard, 10-digit dialing is required.)

Colonial Pipeline Company

COMMUNICATION METHODS & EQUIPMENT

Satellite Phone Numbers, Locations, and Custodians

No.	Toll Free	Location	Custodian	Dock	Dist.
01	866-396-3638	Houston	Dean Chance	X	GCD
02	866-396-3642	Hebert	Robert Frank	X	GCD
03	866-396-3643	Lake Charles	Tim Poole	X	GCD
04	866-396-3645	Baton Rouge	Bobby Blouin	X	GCD
05	866-615-8245	Collins	Doyle Batte	X	GCD
06	866-396-3651	Gulf Coast District Office	Marie Tinsley	X	GCD
07	866-211-1332	Collins Tank Farm	Ann Brashier - Lott		GCD
08	866-755-1542	Gulf Coast Project Leader	Barry Conkle		GCD
09	866-396-3649	Moundville	Troy Gibbons	X	SED
10	866-396-3650	Pelham	Troy Gibbons	X	SED
11	866-396-0851	Atlanta	Eric Cornett	X	SED
12	866-396-0853	Belton	Andy Martin	X	SED
13	866-396-0857	Charlotte	Andy Martin	X	SED
14	866-396-0858	Greensboro	Noel Sheffield	X	SED
15	866-396-0859	Southeast District Office	Val Harlow	X	SED
16	866-435-6959	Director of Operations (Paste)	Angela Kolar		SED
17	866-213-8988	Atlanta Junction	Val Harlow		SED
18	866-396-0714	Mitchell	Clint Hamby	X	NED
19	866-623-2813	Mitchell	Clint Hamby		NED
20	866-396-0715	Richmond	Sean McFadden	X	NED
21	866-396-0716	Fairfax	Brandon La	X	NED
22	866-396-0717	Dorsey	Willie Heater	X	NED
23	866-396-0718	Woodbury	Eric Johnson	X	NED
24	866-396-0719	Linden	Matt Kane	X	NED
25	866-615-8246	Northeast District Office	Eric Johnson	X	NED
26	866-396-0721	Director of Operations (Northeast)	Gerald Beck		NED
27	866-396-0865	Norfolk	Terry Sullivan		NED
28	866-396-5923	Manager, Process Safety/ER	Jeff Titus		OFF
29	866-396-5924	Emergency Response Kit	Mari Mardre		OFF
30	866-272-8076	Emergency Response Kit	Mari Mardre		OFF
31	866-441-9022	Emergency Response Kit	Mari Mardre		OFF
32	866-615-8243	Emergency Response Kit	Mari Mardre		OFF
33	866-615-8244	Sanctuary Park	Ray Reese/Security		OFF
34	866-615-8244	Collins	Doyle Batte		GCD
36	866-396-0720	Emergency Response Kit	Mari Mardre		OFF
37	866-438-1215	Emergency Response Kit	Mari Mardre		OFF

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Albany Junction

West Oakridge Drive, Albany, GA 31717

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Albany Police Dept.	229-431-2100	Albany Fire Dept.	229-431-3266
Albany Police Chief	229-431-3277	Albany Fire Chief	229-431-3269
Albany EMA Director	229-431-2155	Albany Civil Defense	229-431-2155
Dougherty County Police Chief	229-430-6600	Dougherty County Sheriff	229-431-3259
Georgia State Patrol	229-430-6585	911 Non-Emergency Dougherty County	229-431-2132
Dougherty County EMS	229-439-7011		

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Americus Delivery Facility

Plains Road, Americus, GA 31709
229-924-3351

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below.

Americus Police Dept.	229-924-3677	Americus Fire Dept.	229-924-1385
Montezuma Police Chief	478-472-6260	Montezuma Fire Chief	478-472-6223
Marshallville Police Chief	478-967-2232	Marshallville Fire Chief	478-967-2232
Sumter County Fire Chief	229-924-6603	Sumter County Sheriff	229-928-4623
Georgia State Patrol, Post 10	229-931-2397	Sumter County EMA Dir.	229-928-4595
Schley County Sheriff	229-937-2101	Sumter County EMA Dir. Nigel Poole Cell	[redacted]
Lee County Fire Chief	229-759-6090	Schley County EMA Dir.	229-937-2101
Lee County EMA Director	229-759-6023	Schley County Fire Chief	229-937-9093
Macon County Sheriff's Office	478-472-6447	Peach Cty Emer. Mgmt.	478-825-3687
911 Non-Emergency (Macon/Schley/Sumter)	229-937-9011	Lee County Sheriff	229-759-3327
Macon County EMA	478-472-3575	Oglethorpe Fire Dept.	478-957-5820

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cel[redacted]
Home: [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr.* John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Step[redacted]
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Anderson Station

245 Chris De Lane, Starr, SC

864-226-3608

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Anderson Dispatch Fire, EMS, Police 911 or 864-260-4444	Anderson County Emergency Services 864-260-4646 Deputy Chief Taylor Jones

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: [redacted]
Home: [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the **Manager, Process Safety/ Emergency Response * Jeff Titus** Work: 678-762-2231 Cellular: [redacted] In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications. **# See Section 5.01 for Contact Numbers**	**District Environmental Mgr * John Wyatt** Cellular: [redacted] **Director of Operations * Angela Kollar** **Cellular** [redacted] * Initiates Group 8 Notification **District Project Leader * Steph** Work: 336-617-3235 Cellular: [redacted] Home: [redacted] * Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Apex Delivery Facility

2200 Ten Ten Rd, Apex, NC 27539

919-362-8260

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Police	(911) or 919-362-8661	Fire Chief of Apex Keith McGee	(911) or 919-362-4001 919-249-1030
Wake County Emergency Management	919-856-6480	Apex EMS	919-363-1577
Josh Creighton Director	919-856-6485		
EMS John Olsen	919-856-6022	Apex Police	(911) or 919-362-8661
Staff Duty Pager	24-Hr 919-647-2020	NC Highway Patrol	24-Hr 1-800-622-7956
Wake County Sheriff Donnie Harrison	919-856-6900	Wake Co. Local Hwy. Patrol Office	919-733-4400
Wake County LEPC Chairperson	919-856-6900	Hazmat Regional Response Sta. #27	919-431-1390

THIRD: Notify Operation Manager * Don Gardner Work: 336-931-6027 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: (b) (6) [redacted] Hm: (b) (6) [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Athens Delivery Facility

200 Camak Drive, Athens, GA

800-548-4779

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Athens-Clarke County Fire, EMS, Police 911 or 706-546-5900	Athens-Clarke County Emergency Management Division 706-613-3410
Clarke County Police Dept. 706-354-2870	

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Atlanta Junction

3925 Anderson Farm Road, Austell, GA

770-948-8700

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Cobb County Police Dept.	770-499-3900	Cobb County Sheriff	770-499-4600
Cobb County Fire Dept.	770-499-3911	Cobb County Emer Mgmt. Agency	770-499-4567
Cobb County Police Chief	770-499-3904	Paulding County Sheriff (Emergency)	770-443-3010
Paulding Cty. Sheriff (Non-Emergency)	770-445-2117	Paulding Cty. Fire	770-222-1160
Bartow County Sheriff	770-382-5050	Paulding County EMA	770-222-1160
Bartow EMA .	770-387-5089	Bartow County Fire Dept.	770-387-5151
Austell Police	770-944-4331	Austell Fire Chief	770-944-4323
Powder Springs Police	770-943-1616	Dobbins AFB Fire/EMS	678-655-4840

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Bainbridge Delivery Facility

1907 East Shotwell Road, Bainbridge, GA 39819

229-246-4900

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Bainbridge Police Dept.	229-248-2038	Bainbridge Fire Dept.	229-248-2032
Bainbridge Emer. Mgmt. Agency	229-248-2038	Decatur County Sheriff	229-248-3044
Decatur County Fire Chief	229-248-3012	Decatur County EMA Dir.	229-248-3012
Georgia State Patrol	229-758-2651	Mitchell County Sheriff	229-336-2030
Camilla Fire Dept.	229-336-2206	Mitchell Cty. Emer. Mgmt. Dir.	229-336-2072
Baker County Sheriff	229-734-3002	Baker Cty. Emergency Mgmt. Director	229-734-3000
Baker County Sheriff Cell	(b) (6) [redacted]	Pelham Fire Dept.	229-294-6012
911 Non-Emergency Decatur County	229-248-3853	911 Non-Emergency Mitchell County	229-336-2007
911 Non-Emergency Baker County	229-734-3002	Mt. Pleasant Volunteer Fire Dept.	229-246-7559

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Gr[redacted]ion

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Belton Junction

1916 Camelot Forest, Belton, SC

864-332-8113

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Belton Police Dept.	864-338-8448	Anderson County Fire, EMS, Police	864-260-4444
Belton Fire Dept.	864-338-7048	Abbeville County Sheriff, Fire, EMS, Police	864-366-5677
Belton Emer Medical Services	864-338-7555	Abbeville Fire Dept.	864-366-6444
Greenville City Fire Dept. Dispatch	864-271-5333	Anderson Emergency Preparedness Chief Taylor Jones	864-260-4646
Greenville County Fire, EMS, Police	864-271-5210		

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellula (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Birmingham Delivery Facility

2468 Rainbow Avenue S.W. Birmingham, AL 35211

205-923-9665

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Birmingham Police – South Precinct	205-254-2793	Birmingham Fire Dept. –Station #25	205-250-7575
Birmingham Police – North Precinct	205-254-2860	Jefferson County Sheriff's Department	205-325-1450
Jefferson County EMA	205-254-2039		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Boligee Delivery Facility

1049 County Road 80, Boligee, AL 35443

Line 1 – 205-336-8157 Line 2 – 205-336-8240

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Boligee Police	205-336-8531	Green County Sheriff's Department	205-372-3242
Boligee Fire Department	205-336-8575		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Step
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Bremen Station

3921 Bush Mill Road, Bremen, GA 30110
770-537-3821

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below.

Bremen Police Dept.	770-537-4441	Haralson County Sheriff	770-646-2011
Bremen Fire Dept.	770-537-5788	Haralson County Fire Dept.	770-646-2036 ext 11
Carroll County Sheriff	770-830-5888	Carroll County Fire	770-830-5880
Carroll County Emer. Mgmt. Dir.	770-830-5882	Tallapoosa Police	770-574-7211
Tallapoosa Fire	770-574-7211	Carrollton Police	770-834-4451
Carrollton Fire	770-832-3456	Villa Rica Police	770-459-5149
Temple Police	770-562-3151	Temple Fire	770-562-4412
Hiram Police	770-943-3087	Hiram Fire	770-445-3473
911 Non-Emergency Carroll County	770-830-5911	Paulding Fire Dept.	770-222-1160
911 Non-Emergency Haralson County	770-646-0077/1500	Haralson EMA	770-646-2036
Georgia State Police	770-459-3661		

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cel[redacted]
Home [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular [redacted]

Director of Operations * Angela Kolar
Cellular [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Charlotte Delivery Facility

7524 Kenstead Circle, Paw Creek, NC 28130

704-392-8610

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Police (911) or 704-336-2352 Mecklenburg County LEPC Chairman CPAC: Melissa Nicolette Office: 704-427-6827 Cell: (b) (6) [redacted] Hazmat Coordinator: Garry McCormick 704-336-2461 gmccormick@ci.charlotte.nc.us Cell: (b) (6) [redacted]	Fire (911) or 704-336-2441

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the **Manager, Process Safety/ Emergency Response** *** Jeff Titus** Work: 678-762-2231 Cellular: (b) (6) [redacted] In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications. **# See Section 5.01 for Contact Numbers**	**District Environmental Mgr * John Wyatt** Cellular: (b) (6) [redacted] **Director of Operations * Angela Kolar** **Cellular** (b) (6) [redacted] * Initiates Group 8 Notification **District Project Leader * Ste** (b) (6) [redacted] Work: 336-617-3235 Cellular: Home (b) (6) [redacted] * Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Chattahoochee Delivery Facility

3120 Parrott Avenue, NW, Atlanta, GA 30318

404-794-3768

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Fulton County Police Dept.	404-730-5700	Atlanta Police Dept.	404-614-6544
Fulton County Fire Dept.	404-612-5700 404-612-5714	Atlanta Fire Dept.	404-546-7000
Atlanta/Fulton County Emer. Mgmt. Dir.	404-931-2020 404-304-8777	Atlanta Fire Dept. Captain Gardner cell	(b) (6) [redacted]
Atlanta Fire Chief Allan Burton – cell	(b) (6) [redacted]	Union City Fire Dept.	770-964-133
		Fulton County Sheriff	404-730-5100
Georgia State Patrol – Troope	404-430-8472		

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Chattanooga Delivery Facility

4231 Jersey Pike, Chattanooga, TN 37416

423-892-6122

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Chattanooga Police Dept.	423-698-2525	Chattanooga Chief of Police Bobby Dodd	423-643-5000
Chattanooga Fire Dept.	423-266-2753	Hamilton County Sheriffs Dept.	423-622-0022
Hamilton County Fire Dept.	423-622-7777		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-3231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular [redacted]

Director of Operations * Angela Kolar
Cellular [redacted]
* Initiates Group 8 Notification

District Project Leader * Ste [redacted]
Work: 336-617-3235
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Chattanooga Junction

391 Scruggs Road, Ringgold, GA 30736

706-891-9622; 706-891-9509

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

To reach all Fire and Police Departments within Catoosa County including Fort Oglethorpe and Ringgold	706-935-2323	Catoosa County Fire Dept.	706-935-2323
		Fort Oglethorpe Police Dept.	706-866-2512
		Ringgold Police Dept.	706-935-3066

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Coalmont Station

156 Company Farm Road, Coalmont, TN 37313

931-592-9333

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Grundy County Sheriffs Dept.	931-692-3466	Grundy County Fire Dept. 931-924-2077	931-924-2077
Grundy County Emer. Mgmt. Agency	931-924-2077	Marion County Sheriff's Dept.	423-942-2525
Marion County, Fire and Police Dispatcher	423-837-7554	Marion County EMA	423-837-7554
Tennessee Highway Patrol	615-741-2060	Coffee County Sheriff (Dispatch)	931-728-9555
Coffee County Fire Dept.	931-728-9555	Coffee County EMA	931-723-5105
Manchester Police Dept.	931-728-2991		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Dacula Station

End of Pipeline Road, Dacula, GA

770-963-3149

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Gwinnett County Police Dept.	770-513-5000	Gwinnett County Fire Dept. Chief	770-518-4801
Gwinnett County Sheriff	770-822-3140	Gwinnett County Police Chief	770-513-5000
Gwinnett Fire & Emer. Svcs	770-518-4820	Gwinnett County Emer. Mgmt. Agency	770-513-5654
Barrow County Fire Dept.	770-307-2987	Gwinnett EMA – Primary EOC 800 Hi Hope Rd, Lawrenceville, GA 30043	
Barrow County Sheriff	770-307-3084 770-307-3080		
Barrow County EMA	770-307-2987	Gwinnett EMA – Secondary EOC/Shoal Creek Filter Plant 1755 Buford Dam Rd, Buford, GA 3518	
Lawrenceville Police Dept.	770-963-2443	911 Non-Emergency Barrow County	770-307-3122
911 Non-Emergency Gwinnett County	770-513-5911		

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home: 8(b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Danielsville Station

End of Colonial Drive, Danielsville, GA

706-795-2103

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Hart County Fire, EMS, Police	911 or 706-376-3930	Madison County Fire, EMS, Police	706-795-2300
Madison Forest Fire	706-795-2177	Elbert County Fire Chief	706-283-0911
Elbert County Sheriff	706-283-2420		

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Doraville Delivery Facility

2794 Woodwin Road, Doraville, GA

770-451-3808

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Doraville Police Dept.	770-455-1000	Dekalb County Police	678-406-7929
Dekalb County Fire Dept.	678-406-7737	Dekalb County Sheriff	404-298-8100
Dekalb County Fire Chief	404-294-2033	Doraville Police Chief	770-455-1000
Dekalb County Emer. Mgmt. Agency	404-270-0413	911 Non-Emergency Dekalb County	678-937-2852
Dunwoody Police Dept.	678-382-6919		

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

East Nashville Delivery Facility

720 South 2nd Street, Nashville, TN 37213

615-256-7342

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Nashville Police Dept	615-862-8600	Nashville Fire Dept.	615-862-5421
Metro Nashville EMA	615-862-8530	Davidson County Rescue Squad	615-226-0462
Metro Fire Chief (Business Hrs.Only)	615-862-5424	Tennessee Highway Patrol -Nashville	615-741-3181
Nashville Airport Emer Safety & Security	615-275-1703		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Fayetteville Delivery Facility

992 ½ Shaw Mill Rd., Fayetteville, NC 28303
910-488-6545

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Police	(911) or 910-486-1334
Chief of Police – Harold Medlock	910-433-1819
Cumberland County Sheriff	910-677-5400
Non-Emergency	910-323-1500
EMS	919-609-5600
NC Highway Patrol 24-Hr	800-334-7411
Cumberland Co. Local Hwy. Patrol	910-486-1334
County Fire Marshall	(911) or 910-486-1334

Fort Bragg Andrew Moore	910-907-2419
Cumberland Co. Emergency Mgt	910-321-6736
Randy Beeman (Director) After hours	910-483-5467
Gene Booth (Officer)	910-678-7641
Cell	(b) (6) [redacted]
Cumberland County LEPC	910-321-6736
Phillip McCorquodale Chairperson	910-818-6884
Cell	(b) (6) [redacted]
Wk	910-323-9600
Hm	(b) (6) [redacted]

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: (b) (6) [redacted] Hm (b) (6) [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Gaffney Station

842 Old Racetrack Road, Gaffney, SC 29340

864-489-9444

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

City of Gaffney Police	(911) or 864-489-8115	Gaffney Fire Dept. Station 10	911 or 864-487-6516
Cherokee County 911 (24hr)	864-487-2747		
Gaffney Sheriff's Office	864-489-4723		
Director Rick Peterson	864-761-6189		

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: [redacted]
Home: [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Gastonia Station

3175 Union Rd, Gastonia, NC 28052
704-864-0146

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

NC Highway Patrol	(911) or 800-572-6765	Gaston County Sheriff	704-866-3161
Gaston County Emergency Mgt	704-866-3350	Gastonia, NC Fire	704-866-6806
Director Tommy Almond	704-862-6240	Police	704-866-6864
		Belmont, NC Fire Dept	704-825-2771
		Police	704-825-3792

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell [redacted]
Home [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Greensboro Junction

411 Gallimore Dairy Road, Greensboro, NC 27409
336-292-0922

Employee is Notified, or Discovers, that an Emergency Exists
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Police	(911) or 336-373-2222	Fire Chief	(911) or 336-373-2356
Guilford County LEPC Glenn Clapp	336-883-3543	Fire Marshal Chief Kevin Pettigrew	336-373-2032
Emergency Management Services Don Campbell	336-641-6597	Fire Chief Nugent	336-430-6007
Guilford Metro Communications	336-373-2222	City of Greensboro Water Resources Steven Drew (Director)	336-373-7893
		Barry Parsons (Manager)	336-373-7843

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: [redacted] Hm: [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Griffin Delivery Facility

East McIntosh Road, Griffin, GA 30223
770-227-3230

Employee is Notified, or Discovers, that an Emergency Exists
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 5 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Griffin Police Dept.	770-229-6450	Griffin Fire Dept.	770-229-6415
Fayette County Sheriff	770-461-6353	Fayette Cnty Fire & Emergency Svcs.	770-305-5414
Fayette Emer. Mgmt.	770-305-5172	Henry County Sheriff	770-288-7123
Henry County Police Chief	770-288-8215	Henry Cty. Fire Chief	770-288-6600
Henry Cty. Emer. Mgmt. Dir.	770-288-7870	Spalding County Sheriff	770-467-4282
Spalding Cty. Fire Chief	770-228-2129	Spalding Cty. Emer. Mgmt. Dir.	770-228-2129
Georgia State Patrol	770-229-3411	911 Non-Emergency Fayette County	770-461-4357
		911 Non-Emergency Spalding County	770-229-9911
		911 Non-Emergency Henry County	770-957-9121

THIRD: Notify Operations Manager * Robert West Work: 770-619-3552 Cell [redacted]
Home: [redacted] * Initiates Group 5 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 5 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 5 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Hartsfield Delivery Facility 30320

Airport Service Road, Atlanta, GA

404-767-4175

Employee is Notified, or Discovers, that an Emergency Exists
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Fulton County Police Dept.	404-613-5711	College Park Police	404-761-3131
Fulton County Fire Dept.	404-612-5700	College Park Fire Dept.	404-766-8248
City of Atlanta Police	404-546-6900	Atlanta Fire Dept.	404-546-7000
Clayton County Police	770-477-3747	Clayton County Sheriff	770-477-3517
Clayton County Fire Chief	770-473-7833	Clayton Cty. Emer. Mgmt. Dir.	770-477-3798
East Point Police Chief	404-765-1104	East Point Fire Chief	404-559-6401
Hapeville Fire Chief	404-766-4399	Hapeville Police Chief	404-669-2150
Forest Park Fire Chief	404-608-2372	Forest Park Police Chief	404-366-4141
911 Non-Emergency Clayton County	770-411-3550	Atlanta Fire Chief Allan Burton - cell	[redacted]
911 Non-Emergency Fulton County	404-730-7911	Atlanta Fire Captain Jerome Martin – cell	[redacted]
City of Atlanta Call Center	404-614-6544	Atlanta Fire Asst. Chief Rod Smith – cell	[redacted]
		Airport Division – Chief Baker	404-379-6269

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell: [redacted]
Home: [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Heflin Station

6182 Highway 46 Heflin, AL 36264

256-463-2252

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Heflin Police Dept.	256-463-2291	Heflin Fire Dept.	256-463-8911
Cleburne County Sheriff Dept.	256-463-8911	Cleburne County EMA	256-463-7130
Cleburne County Emer. Mgmt.Dir.	256-463-7130	Cleburne County EMA Warning Point	256-463-8911

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Helena Junction

5701 Highway 52, Helena, AL 35080

205-663-1728

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Helena Police Dept.	205-663-6499		Shelby County Sheriff's Dept.	205-669-4181
Helena Fire & Police Dept.	205-439-6918		Helena Police Chief	205-663-6499
Helena Fire Chief	205-663-5809		Birmingham Police-North Precinct	205-254-2860
Birmingham Fire Dept.	205-254-2052		Jefferson County EMA	205-254-2039
Jefferson County Sheriff	205-325-5900 ER# 205-325-1450		Pelham Police Chief	205-620-6550
Pelham Fire Chief	205-620-6500		West Blocton Police Chief	205-938-7806
West Blocton Fire Dept.	24 Hr #205-938-7200		Westover Fire Chief	205-678-9117
Vincent Police Chief	205-672-2261		Harpersville Fire Chief	205-672-7959
Harpersville Police Dept.	205-672-2490		Vincent Fire Chief	Office: 205-672-8070 Cell: (b) (6) [redacted]
Harpersville Fire Dept.	205-672-7959		24-Hr Shelby County E-911	205-439-6918
Shelby County EMA	205-669-3999			

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 6
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Hickory Grove Station

3021 Pumping Hill Rd, Nathalie, VA 24577
434-349-3895

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Police	(911) or 434-476-3334	Fire	(911) or 434-476-3334
Halifax County LEPC Chairperson William Fitzgerald	434-349-3386	Sheriff Fred S. Clark	434-476-3342 434-476-3399
LEPC County Administrator George Nester	434-476-3300	Chief of Police Halifax Chief K. Lands	434-476-2526
Director of Emergency Communications Wendy Jones	434-476-1784		

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: [redacted] Hm: [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates G[redacted]

District Project Leader * Ste[redacted]
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Kannapolis Station

9301 Mooresville Road, Kannapolis, NC 28081
704-786-1917

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Sheriff Office (911) or 704-920-3000 Cabarrus County LEPC 704-920-2143 (Coordinator – Robert Smith)	Fire Marshall Office (911) or 704-920-2143 NC Environmental Dept. 704-786-1783 **WSACC** (Water Sewer Authority Cabarrus County)

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: (b) (6) [redacted]
Home: (b) (6) [redacted] Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work:
Cellula (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Knoxville Delivery Facility

5033 Middlebrook Pike, Knoxville, TN 37921

865-584-1817

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Knoxville Police Dispatch	865-215-7450	Knoxville Police Switchboard	865-215-7000
Knoxville Fire Dept. 24 Hr. Dispatch	865-675-0600	Knox County Rescue Squad	865-546-4821
Tennessee Highway Patrol	865-594-5793	Knox County Sheriffs Dept	865-215-2432

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Step
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Lexington Station

667 Helmstettler Rd., Lexington, NC 27374

336-956-8824

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Police/EMS (911) or 336-249-0131	Fire Marshall Danny Ward (911) or 336-242-2281
Davidson County LEPC Director Larry James (Office) 336-242-2270 (24 Hour Non-Emergency) 336-249-0131 Contact – Stephanie Briles 336-242-2270 Haz Mat – Alton Hanes 336-309-9531	Davidson County Sheriff David Grice (24 Hour Non-Emergency) 336-249-0131
Davidson County Emergency Mgt Director Larry James (Office) 336-242-2270	

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: (b) (6) [redacted] Hm: (b) (6) [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellula (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellula (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Lillington Station

1970 U.S. Hwy 421, Lillington, NC 27546
910-893-5880

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Lillington Police Dept.	(911) or 910-893-9111	Lillington Fire Dept	(911) or 910-893-9111
Day	910-893-3015	Day	910-893-9342
Harnett County LEPC	(Office) 910-893-7580	NC Highway Patrol	24 Hr 1-800-334-7411
Beverly Williams (Chairperson)	(Cell [redacted]	Harnett Co. Local Hwy. Patrol Office	910-893-5704
Gary Pope (Director)			
Harnett County Emergency Mgt	910-893-7580		
Sheriff (Dispatch Line)	910-893-9111		

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: [redacted] Hm: [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Lookout Mountain Delivery Facility

5800 St. Elmo Avenue, Flintstone, GA 37396

706-820-0028

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Walker County Sheriff's Dept.	706-638-1909	Fort Oglethorpe Fire Dept. Business	706-861-4194
Walker County Hazmat Team	706-375-7810		
Walker County Fire Dept.	706-539-1255		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 338-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Moccasin Bend Delivery Facility

811 Pineville Road, Chattanooga, TN 37405
423-266-3287

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below.

Chattanooga Police Dept.	423-698-2525	Chattanooga Fire Dept.	423-266-2753
Chattanooga Chief of Police	423-643-5111	Hamilton County Sheriffs Dept.	423-622-0022
Hamilton County Fire Dept.	423-622-7777		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kollar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3238 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Moundville Station

21116 County Road 21, Moundville, AL 35474
205-371-2233

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 If spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Greene County Sheriff's Dept.	205-372-3242	Hale County Sheriff's Dept.	334-624-9911
Moundville Police Dept.	205-371-2218	Tuscaloosa County Sheriff's Dept.	205-752-0616
Moundville Fire Dept.	334-624-9911	Hale County EMA	334-624-8160
Hale County 911	334-624-9911	Tuscaloosa City Police	205-349-2121
Tuscaloosa EMA	205-349-0150	Environmental Compliance	
Navigation Unit – Tuscaloosa	205-752-3571		
Proj. Mgr. – Tuscaloosa	205-752-3571	WLP, Mobile	800-654-5497
		Parker Towing	205-349-1677
Demopolis Lock	334-289-0645	USCG, Demopolis	334-289-0354

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Murfreesboro Station

1000 Mooreland Lane, Murfreesboro, TN 37128
615-896-1024

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Murfreesboro Police Dept.	615-849-2670	Rutherford County Sheriff's Dept.	615-898-7770
Murfreesboro Fire Dept.	615-893-1422	ER Dispatch Desk (Fire-Police-Ambulance)	615-893-1311
Rutherford County EMA	615-898-7764		
Tennessee Highway Patrol-Nashville	615-741-3181		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3238 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Nashville Airport Delivery Facility

1675 McCory Creek Road, Nashville, TN 37214

615-871-0285

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Nashville Police Dept.	615-862-8600	Nashville Fire Dept.	615-862-5421
Metro Nashville EMA	615-862-8530	Tennessee Highway Patrol-Nashville	615-741-3181
Nashville Airport Emergency Safety & Security	615-275-1703	Davidson County Rescue Squad	615-226-0462
Metro Fire Chief (Business Hours Only)	615-862-5424		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Nashville Delivery Facility

1455 51st Avenue North, Nashville, TN 37209
615-297-0787

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Nashville Police Dept.	615-862-8600	Nashville Fire Dept.	615-862-5421
Metro Nashville EMA	615-862-8530	Davidson County Rescue Squad	615-226-0462
Metro Fire Chief (Business Hrs. Only)	615-862-5424	Tennessee Highway Patrol-Nashville	615-741-3181
Nashville Airport Emer Safety & Security	615-275-1703		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

North Albany Delivery Facility

1164 Gillionville Road, Albany, GA 31717

912-432-2198

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Albany Police Dept.	229-431-2100	Albany Fire Dept.	229-431-3266
Albany Police Chief	229-431-3277	Albany Fire Chief	229-431-3269
Albany EMA Director	229-431-2155	Albany Civil Defense	229-431-2155
Dougherty County Police Chief	229-430-6600	Dougherty County Sheriff	229-431-3259
Georgia State Patrol	229-430-6585	911 Non-Emergency Dougherty County	229-431-2132

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

North Augusta Delivery Facility

219 Sweetwater Road, North Augusta, SC

803-279-8931

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

North Augusta Fire Dept.	803-637-5337	Greenwood County. SC Sheriff	864-942-8600
Richmond County GA Fire, EMS, Police	706-821-1080	McCormick County. SC Sheriff	864-465-3200
Greenwood County. SC Fire Dept.	864-942-8452	Aiken County SC Sheriff & Fire	803-648-6811
McCormick County. SC Fire & Police	864-465-3211	Aiken Regional Medical Center	803-641-5000
Edgefield County. SC Fire & Police	803-637-5337	Richmond County Health Dept.	706-721-5800
University Hospital	706-722-9011	Medical College of Georgia	706-721-0211
North Augusta Public Safety			

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

North Macon Delivery Facility

5019 Forsyth Road, Macon, GA 31210
478-477-3551

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Macon Police Dept.	478-751-7500	Macon Fire Dept. Dispatch	478-751-7300
Bibb County Sheriff	478-746-9441	Macon-Bibb County Fire Dept.	478-751-9180
Lamar County Fire Chief	770-358-5229	Lamar County Sheriff	770-358-5159
Barnesville Police Chief	770-358-1234	Lamar County Emer. Mgmt. Dir.	770-358-2477
Monroe County EMA Dir.	478-256-9506	Monroe County Sheriff	478-994-7048
Crawford County Police	478-836-3119	Crawford County Sheriff	478-836-3116
Oglethorpe Police Chief	478-472-7538	Crawford County EMA Dir.	478-550-7138
Oglethorpe Fire Chief (Home)	(b) (6) [redacted]	Oglethorpe Fire Chief (shop)	478-472-6996
Oglethorpe Fire Chief (Cellular)	(b) (6) [redacted]	Barnesville/Lamar County Fire Dept.	770-358-1246
Bibb/Macon Emergency Mgmt.	478-751-7214	Crawford County Fire Dept.	478-836-3766
Macon County EMA	478-472-3575	GA Dept. of Corrections Macon County	478-472-3564
911 Non-Emergency Macon/Bibb County	478-832-6300	Crawford County 24hr	478-836-3116

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home: (b) (3), (b) (7)(F) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Steph
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Oxford Delivery Facility

2514 Highway 78 East, Oxford, AL 36203

256-831-3561

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Oxford Police Dept.	256-831-3121	Calhoun County Sheriff's Dept.	256-236-6600
Oxford Fire Dept.	256-831-3125	Calhoun County EMA	256-435-0540

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work:
Cellular (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Oxford Station

410 Friendship Road, Oxford, AL 36203

256-831-2951

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Oxford Police Dept.	256-831-3121	Calhoun County Sheriff's Dept.	256-236-6600
Oxford Fire Dept.	256-831-3125	Calhoun County EMA	256-435-0540

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Pelham Junction

2999 Hwy 52 East, Pelham, AL 35124 @ Exit 242 off I-65
205-685-6008

Employee is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below.

Pelham Police Dept.	205-620-6550	Shelby County Sheriffs Dept.	205-669-4181
Pelham Fire & Police Dispatch	205-620-6550	Pelham Police Chief	205-620-6550
Pelham Fire Chief	205-620-6500	Birmingham Police-North Precinct	205-254-2860
Birmingham Fire Dept.	205-250-7575	Jefferson County EMA	205-254-2039
Jefferson County Sheriff	205-325-5900 ER# 205-325-1450	Helena Police Chief	205-663-6499
Helena Fire Chief	205-663-5809	West Blocton Police Chief	205-938-7806
West Blocton Fire Dept.	205-938-7200	24-Hr Shelby County E-911	205-439-6918
Shelby County EMA	205-669-3999	Vincent Police Chief	205-672-2281
Helena Fire Dept.	205-439-6918	Vincent Fire Chief	(w) 205-672-8070 (c) [redacted]

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-3231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Ste[redacted]
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Raleigh Durham Delivery Facility

1010 National Guard Dr., Raleigh, NC 27623

919-840-0063

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Police/ Airport Security/Fire		(911) or 919-840-2111
Wake County Emergency Management		919-856-6480
Joshua Creighton (Director)		919-856-6485
EMS John Olsen		919-856-6022
Staff Duty Pager	24-Hr	919-647-2020
Wake County Sheriff Office	24-Hr	919-856-6900
Sheriff Donnie Harrison		919-856-6911
Fire Chief of Apex		919-362-4001
Keith McGee		(911) or 919-249-1030
NC Highway Patrol	24 Hr	1-800-662-7956
Wake Co. Local Hwy. Patrol Office		919-733-4400
Wake County LEPC		919-856-6480
Keith Wilder Chairperson	Cell	(b) (6) [redacted]
	24 Hr	919-856-6900

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: (b) (6) [redacted] Hm: (b) (6) [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Reidsville Station

State Road 2005, Reidsville, NC

336-342-3008

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Reidsville Police - 911	336-349-1010
Chief Robert Hassell	336-637-3300
Rockingham County Emergency Management	
Johnny Bowles (Director)	336-634-3017
Rockinghham County 911 Center After hours	336-634-3300
Rockingham County LEPC Chairman	
Doug Vick	336-634-3017

Reidsville Fire	(911) or 336-349-1024
Fire Marshall Jay Harris	
Rockingham Co Fire	336-634-3300
Robert Cardwell	

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: (b) (6) [redacted] Hm: (b) (6) [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Steph
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Rome Delivery Facility

2629 Calhoun Road, Rome, GA

706-295-1172

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Floyd County Police Dispatch	706-236-4541	Rome/Floyd County Fire Dept.	706-236-4500
Floyd County Sheriff	706-291-4111	City-County Fire Dept.-Fire Marshal	706-236-4510
City-County Fire Dept. Fire Chief	706-236-4501	Floyd County Emer. Mgmt. Dir.	706-236-5002
GA State Patrol - (Walker County)	706-638-5501	Chattooga County Sheriffs Dept.	706-857-3411
GA State Patrol (Floyd County)	706-295-6002	GA State Patrol (Chattooga County)	706-295-6002
Rome Police Dept	706-238-5111	911 Non-Emergency Floyd County	706-236-4543

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Rome Station

Hwy. 140 & Old Dalton Road, Rome, GA

706-232-8742

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Floyd County Police Dispatch	706-235-7766	Rome/Floyd County Fire Dept.	706-236-4500
Floyd County Sheriff	706-291-4111	City-County Fire Dept.-Fire Marshal	706-236-4510
City-County Fire Dept. Fire Chief	706-236-4501	Floyd County Emer. Mgmt. Dir.	706-236-5002
GA State Patrol - (Walker County)	706-638-5501	Chattooga County Sheriffs Dept.	706-857-3411
GA State Patrol (Floyd County)	706-295-6002	GA State Patrol (Chattooga County)	706-295-6002
Rome Police Dept	706-238-5111	911 Non-Emergency Floyd County	706-236-4543

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Selma Delivery Facility

2335 West Oak St, Selma, NC 27576
919-965-3808

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Police	(911) or 919-934-9411
Non-Emergency	919-965-8189
Johnston County Emergency Mgt	
Kim Robertson (Director)	919-989-5050
Darrell Alford (Coordinator)	
Johnston County EMS	(Office) 919-989-5050
County Fire Marshall	(911) or 919 934-9411
	Office 919-989-5050
Selma Fire Dept.	
Fire Chief Phillip McDaniel	(911) or 919-934-9411
919-524-6579	
NC Highway Patrol	(24 Hr) 1-800-662-7956
Johnston Co. Local Hwy. Patrol Office	919-934-2186

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: (b) (6) [redacted] Hm: (b) (6) [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Signal Mountain Station

1202 Suck Creek Road, Chattanooga, TN 37405
423-886-1803

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Chattanooga Police Dept.	423-698-2525	Chattanooga Fire Dept.	423-266-2753
Marion County Sheriffs Dept.	423-942-2525	Marion County EMA	423-837-7554
Chattanooga Chief of Police-Bobby Dodd	423-643-5111	Hamilton County Sheriffs Dept.	423-622-0022
Hamilton County Fire Dept.	423-622-7777		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Simpsonville Station

8 Jim Carey Way, Fountain Inn SC 29644

864-967-7541

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Greenville County Police/Fire/EMS/Sheriff	(911) or 864-271-5210	Greenville County Emergency Management Services	864-467-2680
Simpsonville Fire Dept.	864-967-9545	Simpsonville Police Dept.	864-967-9536

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: [redacted]
Home: [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Smyrna Station

2745 Spring Road, Smyrna, GA 30080

770-436-8336

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Smyrna Police Dept.	678-631-5100	Cobb County Police	770-499-3900
Smyrna Fire Dept.	770-434-6667	Cobb County Fire Department	770-499-3911
Smyrna Fire Chief	678-631-5364	Smyrna Police Chief	678-631-5099
Smyrna Emer. Mgmt	678-631-5364	Cobb County Sheriff	770-499-4600
Cobb County Dir. Of Public Safety	770-528-3800	911 Non-Emergency City of Smyrna	770-434-6666

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

South Albany Delivery Facility

1605 West Oakridge Drive, Albany, GA 31717

229-432-1523

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Albany Police Dept.	229-431-2100	Albany Fire Dept.	229-431-3266
Albany Police Chief	229-431-3277	Albany Fire Chief	229-431-3269
Albany EMA Director	229-431-2155	Albany Civil Defense	229-431-2155
Dougherty County Police Chief	229-430-6600	Dougherty County Sheriff	229-431-3259
Georgia State Patrol	229-430-6585	911 Non-Emergency Dougherty County	229-431-2132

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell [redacted]
Home: [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

South Macon Delivery Facility

Allen Road, Macon, GA 31206

478-788-7272

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Macon/Bibb Fire Dept.	478-751-9180	Macon Fire Dept.	478-751-7300
Bibb County Sheriff	478-746-9441	Peach County Fire Chief	478-825-3687
Peach County Emer. Mgmt. Agency	478-825-3687	Macon County Sheriff	478-472-6447
Bibb County EMA Director	478-832-6300	Montezuma Fire & Emergency Service	478-472-6223
Fort Valley Police	478-825-3383	Fort Valley Fire Chief	478-825-5190
911 Non-Emergency Peach County	478-822-9111	Macon County EMA	478-472-3575
911 Non-Emergency Macob/Bibb County	478-832-6300	Fort Valley Dept. of Public Safety	478-825-5190
911 Non-Emergency Macob/Bibb County	478-751-7500	Fort Valley State University Campus Police	478-825-6211
Schley County EMA	222-937-2101	Schley County Fire & EMS	229-937-9093

THIRD: Notify Operations Manager * Robert West Work: 770-819-3552 Cell (b) (6) [redacted]
Home (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Spartanburg Delivery Facility

180 Keltner Rd., Spartanburg, SC 29302

864-641-3602

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Highway Patrol	(911) or 864-587-4700	Spartanburg City Fire Dept.	864-596-2083
24 Hr – 911	864-596-2222	Spartanburg Emergency Response HAZMAT	803-896-4111
County Emergency Preparedness Dept. Coordinator Doug Bryson	864-595-5365		
Spartanburg Police Dept.	864-596-2035		

THIRD: Notify Operations Manager * Mike Cutting Work: 864-332-8105 Cell: (b) (6) [redacted]
Home: (b) (6) [redacted] * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

St. Ives Station

171 Logan Martin Road, Hwy 54, Alpine, AL 35014
256-268-2623

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082)

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

St. Clair County Sheriff's Dept.	205-884-6840	St. Clair County EMA	205-884-6800
St. Clair County EMA Warning Point	205-884-6800	Talladega County Sheriff	256-362-2748
Talladega County EMA	256-761-2125		
Talladega County EMA Warning Point	256-362-4162		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-3311
Cellular: [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kollar
Cellular: [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home: [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Sweetwater Station

10986 Old Washington Pike, Sweetwater, TN 37846

423-337-6720

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Monroe County Police & Fire	423-442-4357	Loudon County EMA	865-986-9081
Loudon County Sheriffs Dept.	865-458-9081		

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: (b) (6) [redacted]
Home: (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Vance Station

613 Parsons Lane, West Blocton, AL 35184

205-938-2400

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Bibb County Sheriff's Dept.	205-926-4683	Vance Police Dept.	205-752-0616
Vance Police Chief	205-553-8278	Vance Fire Chief	205-507-0929 or 205-553-6084
Tuscaloosa County Sheriff's Dept.	205-752-0616	Tuscaloosa County Emer. Mgmt.	205-349-0150
EMA Warning Point	205-926-3129	Bibb County EMA	205-926-3113
Bibb County Dispatch	205-938-7200 or 205-926-3129	Bibb County Service Ambulance	205-926-3129

THIRD: Notify Operation Manager * Troy Gibbons Work: 205-685-6001 Cell: (b) (6) [redacted]
* Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular: (b) (6) [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular (b) (6) [redacted]

Director of Operations * Angela Kolar
Cellular: (b) (6) [redacted]
* Initiates Group 8 Notification

District Project Leader * Step (b) (6) [redacted]
Work: 336-617-3235 Cellular:
Home (b) (6) [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

EMERGENCY NOTIFICATION FLOWCHART

Witt Station

3381 Mount View Rd. (Hwy 745), Danville, VA 24540
434-836-4716

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Pittsylvania County LEPC Director: Jim Davis	(Office) 434-432-7921 (Cell [redacted]	Danville Police Dept. Chief: Philip Broadfoot	434-799-6510
Pittsylvania County Communications Center	434-432-7931	Danville Division of Emergency Mgt Director: Chief Steven Dishman	434-799-6535
Pittsylvania County Fire Marshall Steve Bowman	(Office) 434-432-7936 (Cell) [redacted]	Danville 24Hr Non-Emergency If no answer, call First Station One	434-799-5111 434-799-5226
Pittsylvania Sheriff's Office Mike Taylor Danville Sheriff's Office Mike Mondul	434-432-7800 434-799-5135	Danville Fire Dept. Chief: David Eagle	434-799-5111

THIRD: Notify Operations Manager * Don Gardner Work: 336-931-6027 Cell: [redacted]
* Initiates Group 8 Notification
Associate Operations Manager: Brian Smith Wk: 336-931-6077 Cell: [redacted] Hm [redacted]

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Manager, Process Safety/ Emergency Response
*** Jeff Titus**
Work: 678-762-2231
Cellular [redacted]

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

 # See Section 5.01 for Contact Numbers

District Environmental Mgr * John Wyatt
Cellular: [redacted]

Director of Operations * Angela Kolar
Cellular [redacted]
* Initiates Group 8 Notification

District Project Leader * Stephen Thomas
Work: 336-617-3235 Cellular: [redacted]
Home [redacted]
* Initiates Group 8 Notification

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Colonial Pipeline Company

911 CONTACT LIST

District	State	County	City	24 hour Number
Northeast	DC	Washington	Washington	202-373-3700, Option 1-police Option 2 = fire
Northeast	DE	New Castle	New Castle	302-571-7331
Northeast	MD	Anne Arundel	Millersville	410-987-1212
Northeast	MD	Baltimore	Towson	410-887-2223
Northeast	MD	Baltimore City	Baltimore	410-396-2677
Northeast	MD	Carroll	Westminster	410-386-2260
Northeast	MD	Cecil	Elkton	410-392-2011
Northeast	MD	Harford	Forest Hill	410-638-3400
Northeast	MD	Howard	Ellicott City	410-313-2911
Northeast	MD	Montgomery	Gaithersburg	301-279-8000
Northeast	MD	Prince George's	Largo	302-583-2200
Northeast	NJ	Burlington	Westampton	609-518-7200
Northeast	NJ	Camden	Lindenwold	856-783-4808 ext. 6200
Northeast	NJ	Gloucester	Clayton	856-589-0911
Northeast	NJ	Mercer	Lawrenceville	609-799-0110
Northeast	NJ	Essex	West Orange	973-621-4111
Northeast	NJ	Middlesex	Sayreville	732-316-7500
Northeast	NJ	Union	Westfield	908-654-9800
Northeast	NJ	Somerset	Somerville	908-526-2500
Northeast	NJ	Salem	Woodstown	856-769-1955
Northeast	NY	Richmond	Brooklyn	518-292-2200
Northeast	PA	Chester	West Chester	610-344-5500
Northeast	PA	Delaware	Media	610-565-6500
Northeast	PA	Philadelphia	Philadelphia	215-685-1170
Northeast	VA	Appomattox	Appomattox	434-352-8241
Northeast	VA	Bedford	Bedford	540-586-7827
Northeast	VA	Buckingham	Buckingham	434-969-3772
Northeast	VA	Campbell	Rustburg	434-332-9574
Northeast	VA	Charles City	Charles City	804-829-9265
Northeast	VA	Charlotte	Charlotte Court House	434-542-5131
Northeast	VA	Chesterfield	Chesterfield	804-748-1251
Northeast	VA	City of Chesapeake	Chesapeake	757-382-6161
Northeast	VA	City of Newport News	Newport News	757-247-2500
Northeast	VA	City of Portsmouth	Portsmouth	757-393-5300
Northeast	VA	City of Richmond	Richmond	804-646-5500
Northeast	VA	City of Suffolk	Suffolk	757-923-2350, then press 0
Northeast	VA	Cumberland	Cumberland	804-492-4120
Northeast	VA	Fluvanna	Palmyra	434-589-8211

Colonial Pipeline Company
911 CONTACT LIST

Northeast	VA	Henrico	Henrico	804-501-5000
Northeast	VA	Isle of Wight	Isle of Wight	757-357-2151
Northeast	VA	James City	Toano	757-566-0112
Northeast	VA	Louisa	Louisa	540-967-1234
Northeast	VA	Lynchburg City	Lynchburg	434-455-4285
Northeast	VA	Orange	Orange	540-672-1234
Northeast	VA	Powhatan	Powhatan	804-598-5656
Northeast	VA	Prince Edward	Farmville	434-392-8101
Northeast	VA	Surry	Surry	757-294-5264
Northeast	VA	York	Yorktown	757-890-3621
Northeast	VA	Culpeper	Culpeper	540-727-7900
Northeast	VA	Fairfax	Fairfax	703-877-3840
Northeast	VA	Fairfax City	Fairfax	703-385-7924 City of Fairfax Police
Northeast	VA	Fauquier	Warrenton	540-347-6843
Northeast	VA	Prince William	Woodbridge	703-369-1113
Southeast	AL	Shelby	Pelham	205-439-6919
Southeast	AL	St Clair	Pell City	205-884-3333
Southeast	AL	Talladega	Talladega	256-761-2125
Southeast	AL	Tuscaloosa	Tuscaloosa	205-464-8642 County Sheriff
Southeast	GA	Catoosa	Ringgold	706-935-2323
Southeast	GA	Chattooga	Summerville	706-857-0750
Southeast	GA	Walker	Lafayette	706-638-1909
Southeast	GA	Baker	Newton	229-734-3002
Southeast	GA	Barrow	Winder	770-307-3122
Southeast	GA	Bartow	Cartersville	770-387-5195
Southeast	GA	Bibb	Macon	478-751-7500
Southeast	GA	Carroll	Carrollton	770-830-5911
Southeast	GA	Clayton	Jonesboro	770-477-3550
Southeast	GA	Cobb	Marietta	770-499-4618
Southeast	GA	Crawford	Knoxville	618-546-1515
Southeast	GA	Decatur	Bainbridge	229-248-3000
Southeast	GA	Dekalb	Tucker	404-294-2911
Southeast	GA	Dougherty	Albany	229-431-2132
Southeast	GA	Douglas	Douglasville	770-949-6408
Southeast	GA	Fayette	Fayetteville	770-461-6353
Southeast	GA	Floyd	Rome	706-236-4541
Southeast	GA	Fulton	Atlanta	404-730-7911
Southeast	GA	Fulton	Sandy Springs	404-843-6630
Southeast	GA	Gwinnett	Lawrenceville	770-513-5911
Southeast	GA	Haralson	Buchanan	770-646-1500

Colonial Pipeline Company
911 CONTACT LIST

Southeast	GA	Henry	McDonough	770-957-9121
Southeast	GA	Jackson	Jefferson	706-367-1853
Southeast	GA	Lamar	Barnesville	770-358-5159
Southeast	GA	Lee	Leesburg	229-854-1362
Southeast	GA	Macon	Oglethorpe	478-472-6447
Southeast	GA	Mitchell	Camilla	229-336-2007
Southeast	GA	Monroe	Forsyth	478-994-7010
Southeast	GA	Paulding	Dallas	770-505-2872
Southeast	GA	Peach	Fort Valley	478-822-9111
Southeast	GA	Schley	Oglethorpe	229-937-9011
Southeast	GA	Spaulding	Griffin	770-467-4311
Southeast	GA	Sumter	Americus	229-937-9011
Southeast	GA	Clarke	Athens	706-546-5900
Southeast	GA	Elbert	Elberton	706-283-2026
Southeast	GA	Hart	Hartwell	706-376-3930
Southeast	GA	Madison	Danielsville	706-795-2101
Southeast	GA	Richmond	Augusta	706-821-1080
Southeast	NC	Cabarrus	Concord	704-920-3000
Southeast	NC	Cleveland	Shelby	704-484-4875
Southeast	NC	Gaston	Gastonia	704-866-3300
Southeast	NC	Mecklenburg	Charlotte	704-336-3671 704-336-5120
Southeast	NC	Rowan	Salisbury	704-216-8500
Southeast	NC	Alamance	Graham	336-570-6777
Southeast	NC	Chatham	Pittboro	919-542-2911
Southeast	NC	Cumberland	Fayetteville	910-483-5467
Southeast	NC	Davidson	Lexington	336-249-0131
Southeast	NC	Guilford	Greensboro	336-373-4500
Southeast	NC	Guilford	High Point	336-883-3224
Southeast	NC	Harnett	Lillington	910-893-9111
Southeast	NC	Johnston	Smithfield	919-934-9411
Southeast	NC	Rockingham	Reidsville	336-634-3300
Southeast	NC	Wake	Raleigh	919-829-1911
Southeast	NC	Wake	Morrisville	919-840-2111
Southeast	SC	Abbeville	Abbeville	864-366-7451
Southeast	SC	Aiken	Aiken	803-642-1762
Southeast	SC	Anderson	Anderson	864-260-4444
Southeast	SC	Cherokee	Gaffney	864-487-2747
Southeast	SC	Edgefield	Edgefield	806-637-5337
Southeast	SC	Greenville	Greenville	864-271-5210
Southeast	SC	Greenwood	Greenwood	864-942-7232

Colonial Pipeline Company
911 CONTACT LIST

Southeast	SC	Laurens	Laurens	864-984-2523
Southeast	SC	McCormick	McCormick	864-465-2000
Southeast	SC	Spartanburg	Spartanburg	864-596-2222
Southeast	SC	York	Rock Hill	803-329-1110
Southeast	TN	Bradley	Cleveland	423-728-7311, then press 0
Southeast	TN	Coffee	Manchester	931-728-2991
Southeast	TN	Davidson	Nashville	615-862-8530
Southeast	TN	Grundy	Tracy City	931-924-2077
Southeast	TN	Hamilton	Hixson	423-622-0022
Southeast	TN	Knox	Knoxville	865-215-1179
Southeast	TN	Loudon	Loudon	865-458-9081
Southeast	TN	Marion	Kimball	423-942-2525
Southeast	TN	McMinn	Athens	423-745-3222
Southeast	TN	Monroe	Madisonville	423-422-4357
Southeast	TN	Rutherford	Murfreesboro	615-898-7770
Southeast	VA	Danville City	Danville	434-799-5111
Southeast	VA	Halifax	Halifax	434-476-3334
Southeast	VA	Pittsylvania	Chatham	434-432-7931
Gulf Coast	AL	Sumter	Livingston	205-652-2841 (Sheriff)
Gulf Coast	LA	Acadia	Crowley	337-788-8700
Gulf Coast	LA	Calcasieu	Lake Charles	337-439-9911
Gulf Coast	LA	Jefferson Davis	Jennings	337-821-2115
Gulf Coast	LA	St Landry	Opelousas	337-948-9277
Gulf Coast	LA	East Baton Rouge	Baton Rouge	225-383-4425
Gulf Coast	LA	East Feliciana	Clinton	225-683-5459
Gulf Coast	LA	Pointe Coupee	Morganza	225-694-3737
Gulf Coast	LA	West Feliciana	St. Francisville	225-784-3136
Gulf Coast	LA	St Helena	Greensburg	225-222-4413
Gulf Coast	LA	St Tammany	Covington	985-898-2338 (Sheriff)
Gulf Coast	LA	Plaquemines	Belle Chasse	504-297-5600
Gulf Coast	LA	St Bernard	Chalmette	504-271-2501 (Sheriff)
Gulf Coast	MS	Amite	Liberty	601-657-8057
Gulf Coast	MS	Clarke	Quitman	601-776-3960
Gulf Coast	MS	Covington	Collins	601-765-8281
Gulf Coast	MS	Hancock	Kiln	228-255-9191
Gulf Coast	MS	Jasper	Bay Springs	601-764-2588 Jasper Co. Sheriff 911
Gulf Coast	MS	Jefferson Davis	Prentiss	601-792-5169
Gulf Coast	MS	Jones	Laurel	601-425-0270
Gulf Coast	MS	Kemper	Scooba	601-743-2255
Gulf Coast	MS	Lamar	Purvis	601-794-8610

Colonial Pipeline Company
911 CONTACT LIST

Gulf Coast	MS	Lauderdale	Meridian	601-486-4952
Gulf Coast	MS	Marion	Columbia	601-736-2711, then 0 to reach dispatch
Gulf Coast	MS	Pearl River	Poplarville	601-795-2241
Gulf Coast	MS	Pike	McComb	601-684-3213
Gulf Coast	MS	Smith	Raleigh	601-782-4531
Gulf Coast	MS	Walthall	Tylertown	601-876-3481
Gulf Coast	TX	Chambers	Anahuac	409-267-8318
Gulf Coast	TX	Harris	Spring	281-440-4300
Gulf Coast	TX	Jefferson	Beaumont	409-835-8668
Gulf Coast	TX	Liberty	Liberty	936 336-4500, then dial 0 for dispatch
Gulf Coast	TX	Orange	Orange	409-883-2612

Colonial Pipeline Company

LEAK DETECTION & EMERGENCY PROCEDURES

The Supervising Control and Data Acquisition (SCADA) system continuously monitors the entire pipeline system from the Atlanta Control Center, injection facility, or originating location. The SCADA system updates the status of the pipeline approximately every 30 seconds and will initiate an alarm if abnormal conditions exist. This system is unaffected by adverse weather. It is the duty of the Controller or Facility Operator to monitor pipeline segments for abnormal operations, which could cause a release or other emergency.

In the event of an emergency the Controller or Operator will respond in accordance with Emergency Operating Procedure(s).

The Controller/Operator will:

Immediately perform Emergency Operation Procedure (EOP) as required to place line/line segment and equipment in a safe, shutdown, depressurized, and isolated condition.

Perform additional actions as required to make proper notifications, reports, and initiate investigations to determine cause and repairs as necessary.

Complete the Leak Report Questionnaire/Checklist which is included on page 4 of this section.

Obtain authorization prior to returning any line/line segment to service.

Events and conditions considered abnormal operations for the pipeline control center and facilities include the following:

Suspected Leak
Meter Imbalance
Operating Pressure Exceeded
Anomaly
Unintended control valve closure (Close-Out of Delivery)
Line blockage.
Loss of a pump.
Loss of a pumping station
Loss of Electrical Power
Unexpected increase or decrease in pressure (outside of normal operating limits)
Unexpected increase or decrease in flow (outside of normal operating limits)
Loss of communications (Voice)
Loss of supervisory circuit (Data Communication)
Operation or Failure of safety devices
Control Center HVAC Failure
Tank High Level
Tank Maximum Fill (High High Level)
Control Center Halon Initiated or Failed to Initiate

Colonial has developed Operating Procedures for events and conditions that are considered emergency operations for the pipeline control center and facilities. These procedures cover:

Fire or explosion
Leak
Tank Overflow
Evacuation
Complete Loss of Communication
Natural Disasters
Security

Colonial Pipeline Company

LEAK DETECTION & EMERGENCY PROCEDURES

Colonial's Operating Procedures are available to all Operators and Controllers via the Colonial Intranet. In addition, paper copies are available at each Controller Console in the Atlanta Control Center and at all staffed Delivery Facilities.

Abnormal and emergency operations can be prevented or mitigated through training, both initial and recurring. All of these events are discussed during the following:

Associate Controller training (initial certification)
Simulator training (annual three-hour session)
Maximum Critical Event training (twelve tabletop scenarios per year)

LEAKS

The criteria listed below should serve as a guide for determining the action to be taken by the Controller or Operator.

Reports accepted as conclusive evidence of a leak requiring the line to be shut down immediately:

1. Reported visual sighting of product/vapor (including product release due to line damage/puncture by equipment).
2. Sudden unexpected change in pressure and/or flow rate.
3. Suspected leak monitoring/investigation has determined a leak is present.
4. Activation of Leak Detection Alarm.

Reports of the following are to be investigated while continuing to operate the line under close observation:

1. Report of product odor.
2. Report of soil discoloration.
3. Report of dead vegetation on or in the vicinity of the right of way.
4. Report of sheen on water in vicinity of right of way.
5. Unusual Low pressure trend (Exp: Returning to service of an inactive line or segment of line).
6. Unusual variance in flow rates/pressure between Origin and Delivery Points (Exp. High origination and injection rates or low delivery rates).
7. Unexpected alarm/condition which may indicate a leak.

IF THERE IS EVER ANY DOUBT OF THE EXISTENCE OF A LEAK, THE LINE WILL BE SHUT DOWN AND THE SUSPECT LINE SEGMENT WILL BE ISOLATED.

<u>Information to Obtain</u>

Information should be as complete and detailed as possible in order to determine the location and extent of the emergency. Company Form No. 7082, REV. 11/98 "Leak Report Questionnaire/Checklist" (shown on page 4 of this section), should be completed when receiving a call concerning a leak or other emergency.

After the basic information has been obtained and initial notification and/or actions have been taken (monitoring the line for a pressure drop/increased flow rate, or in the case of a confirmed leak, shutting down the line), the person receiving the call should determine the following:

Colonial Alignment Map Number.
Stationing.
Area involved (farmland, homes, or industrial, etc.).
Direction and distance from communities, highways, rivers and railroads.
Type of product.
Amount of product (size of leak and area covered).

The employee who first becomes aware of the emergency should immediately notify the Atlanta Controller or originating location. Notification should then be made as outlined on the Emergency Notification flow chart posted at all locations (Section 2.03 of this plan).

After the initial notification and/or actions have taken place, the employee should contact the Atlanta Controller or originating location with any additional information available. This information should include pressure changes, flow rate changes, malfunction of equipment, etc.

Colonial Pipeline Company

LEAK DETECTION & EMERGENCY PROCEDURES

LEAK REPORT QUESTIONNAIRE/CHECKLIST

WHEN A REPORT OF A LEAK OR A SUSPECTED LEAK IS RECEIVED, THE PERSON RECEIVING THE CALL SHOULD OBTAIN SUFFICIENT INFORMATION FROM THE PERSON MAKING THE REPORT TO COMPLETE THE FOLLOWING SECTIONS OF THIS FORM.

TIME:	LINE NUMBER:	CONTROLLER/OPERATOR:	DATE:

LOCATION OF LEAK

CITY, COUNTY & STATE:	STREET OR ROAD NUMBER:	
LANDMARKS OR OTHER REFERENCE LOCATIONS:	DISTANCE TO NEAREST ROW:	GPS COORDINATES:

LEAK REPORTED BY

NAME:	ADDRESS:	PHONE NUMBER:

TITLE OR ORGANIZATION:

DESCRIBE DETAILS

IF IT CAN BE DETERMINED, PRODUCT AT LEAK SITE: [ ] GASOLINE [ ] KEROSENE [ ] FUEL OIL [ ] UNDETERMINED

ARE THERE AFFECTED BODIES OF WATER?	HAVE ROADS BEEN CLOSED? [ ] NO [ ] YES (detail below)
WHAT ARE CURRENT WEATHER CONDITIONS ON SCENE?	DESCRIPTION OF THE SCENE? (record below)

SAFETY

IS THERE FIRE OR PERSONAL INJURY? [ ] NO [ ] YES (detail below)	HAVE THE FIRE AND POLICE DEPTS. BEEN NOTIFIED? [ ] FIRE [ ] POLICE
ARE THERE IGNITION SOURCES NEARBY? [ ] NO [ ] YES (detail below) [ ] UNSURE	IS THE CALLER IN A SAFE LOCATION? [ ] YES [ ] NO (encourage them to retreat to safe distance)
HOW STRONG IS THE ODOR? [ ] STRONG [ ] MODERATE [ ] LIGHT	HOW POPULATED IS THE AREA? [ ] HEAVILY [ ] MODERATE [ ] LIGHT [ ] RURAL
HAS ANY AIR MONITORING BEEN CONDUCTED? [ ] NO [ ] YES RESULTS	HOW HEAVY IS THE TRAFFIC THROUGH THE AREA? [ ] HEAVY [ ] MODERATE [ ] LIGHT

OPERATING DIRECTIONS

REPORTS ACCEPTED AS CONCLUSIVE EVIDENCE OF A LEAK REQUIRING THE LINE BE SHUT DOWN IMMEDIATELY:

1. THE LINE HAS BEEN DAMAGED OR PUNCTURED BY EQUIPMENT.
2. POLICE OR FIRE DEPT. REPORTS VISUAL SIGHTING OF PRODUCT OR HAVE RECEIVED CALLS OF A VISUAL SIGHTING.
3. SUDDEN UNEXPLAINED CHANGE IN PRESSURE AND/OR FLOW RATE.
4. INDIVIDUAL MAKES A POSITIVE REPORT OF PRODUCT SIGHTING.

REPORTS OF THE FOLLOWING ARE TO BE INVESTIGATED WHILE CONTINUING TO OPERATE THE LINE WHILE MAINTAINING CLOSE OBSERVATION:

1. REPORT OF PRODUCT ODOR.
2. REPORT OF SOIL DISCOLORATION.
3. REPORT OF PRESENCE OF DEAD VEGETATION ON, OR IN THE VICINITY OF, THE RIGHT-OF-WAY (ROW).
4. RECURRING MINOR HOURLY SHORTAGES.
5. REPORT OF SHEEN ON WATER IN VICINITY OF RIGHT-OF-WAY.
6. UNUSUAL VARIANCE IN FLOW RATES / PRESSURE BETWEEN ORIGIN AND DELIVERY POINTS.
7. UNEXPECTED ALARM CONDITION WHICH MAY INDICATE A LEAK.
8. LEAK DETECTION ALARM.

AFTER COMPLETING CHECKLIST, BEGIN NOTIFICATIONS PER THE "EMERGENCY NOTIFICATION FLOW CHART."

INITIAL ACTIONS TAKEN *(use back of form if needed.)*

Form 7082 – Revised 10/13/15

Colonial Pipeline Company
INITIAL RESPONSE ROLES & RESPONSIBILITY

PROCEDURES

Initial Procedures

Upon confirmation of a release, Colonial must make an initial assessment to determine the type of material and estimated volume. This assessment is usually conducted by the Atlanta Control Center Operations Manager. As part of this initial assessment, it is necessary for Colonial field personnel to determine the geographical and environmental factors of the area surrounding the release in order to plan the proper protective and remedial measures. The steps for the ascertaining the environmental impact of the release are as follows:

Release site: Investigate the release location and the affected natural areas to verify the extent of damage. Determine if any immediate actions at the scene can lessen further damage. At the release site, Colonial Personnel should determine the direction and rate of the flow. Steps should be taken to stop the discharge of additional material and to safely contain the release if possible.

Areas of immediate danger: Following the assessment of the spill site, Colonial or its' contractors should examine the areas immediately downstream or adjacent to the release, which may not have been affected, but are in immediate danger of contact with the release ("***Immediate danger" can be defined as occurring in a matter of hours).*** If sensitive areas are located, then preemptive measures should be taken to minimize the impact prior to contact with product. This includes, but is not limited to, booms, dams, or other diversion measures to lessen the impact prior to contact.

Areas of potential danger: While steps are being taken to control the spread of the release, Colonial shall conduct reconnaissance to determine what other sensitive areas might be impacted if the flow continues downstream. If sensitive areas are located, provisions shall be made to protect these areas. Preparation should be made for the deployment of additional resources as necessary.

SECONDARY PROCEDURES

Once a sensitive area has been identified and protective measures have been taken, the Colonial site commander shall monitor the integrity and effectiveness of those measures. At a minimum, a daily inspection will be carried out to ensure that the protective measures are secure and that no additional measures are required. The Colonial site commander will also monitor the ecological health of the threatened area.

PUBLIC AFFAIRS COMMUNICATIONS STRATEGY

Objective

By effectively communicating factual information about Colonial objectives, functions, accidents, accomplishments, plans, activities, facilities, and personnel, Colonial's public and community relations activities should:

Create acceptance of Colonial as a good neighbor serving an important purpose.
Promote credibility, respect, and fair treatment on the part of news media and community leaders toward Colonial.
Avoid or correct misunderstandings about Colonial.
Defend Colonial's reputation at all times, but particularly during times of crises when erosion of that reputation is most likely to occur. Defending Colonial in the "court of public opinion" is especially critical.

Colonial Pipeline Company
INITIAL RESPONSE ROLES & RESPONSIBILITY

Organizational Responsibility

The Director of Communications will coordinate the release of information about Colonial, obtaining prior leadership approval as required.

Media inquiries and information requests to Colonial will be directed to the Director of Communications who will either respond or authorize others to respond, with the approval of leadership.

As an exception, an officer, leader, or manager may make a direct response if he or she believes it is appropriate and in the best interest of Colonial. However, the Director of Communications must be informed of such contacts and, as a general rule, all requests and inquiries should be referred to the Public Affairs.

General

Advance approval must be obtained from Corporate Communications before providing information that has not been published or released previously in the following areas:

Colonial's position on topical issue
Colonial financial data
Expansion plans, personnel changes, and new or changed policies
Technical operating data
Articles, speeches, and papers that refer to Colonial
Photographs of Colonial facilities
Advertisements

Dealing with the Media

The content and tone of answers to questions will have a definite bearing on how favorable the coverage is to Colonial. Be confident. Do not be defensive or vague. Do not be critical of other agencies involved. Be factual and courteous. Do not speculate.

Reporters cannot be "brushed off." Any attempt to avoid cooperating with them will hurt Colonial. Calm, advised answers make their jobs easier, and will more quickly satisfy them. A promise to supply more complete information later must be kept. Supplemental information may be forwarded even though it is not specifically requested.

Reporters live by deadlines and want as much information as possible as soon as possible. An emergency is a difficult time to give a clear and complete story. Do not give a persistent reporter hasty, incorrect, or answers in exasperation. Do not be intimidated. When possible, answer specifically what is asked. Try to avoid embellishing.

If asked a question that cannot be answered, give a valid reason why this is the case. It is acceptable to say, "I do not know the answer to that." Never say "No comment."

Employees should not, except as authorized, consent to interviews with the news media, insurance adjusters, government investigators, or other non-Colonial personnel.

Colonial Pipeline Company
INITIAL RESPONSE ROLES & RESPONSIBILITY

ALL EMERGENCIES

In emergency situations, designated field personnel may respond directly, as provided under Minor Emergencies and Major Emergencies below. Corporate Communications should be informed of all inquiries and answers so all corporate responses can be coordinated, made current, remain consistent, corrected, and clarified as necessary.

Minor Emergencies

To prevent exaggerated reports, the Director of Communications (or Director of Operations, Operations Manager, or other designated Company spokesperson when the Corporate Communications Manager is unavailable) will respond to all inquiries following the guidelines listed below:

Confirm that Colonial has experienced an irregularity in operations, but emphasize that there is no apparent danger to the public. If there are dangers to the public state them factually and explain what actions local government agencies and Colonial are taking.
In simple terms, describe what happened, where it happened, and when.
Explain what is being done to remedy or normalize the situation.

Major Emergencies

In the event of news media inquiries regarding events such as fires, explosions, significant releases, pollution, property damage, sabotage, serious injuries, death, or any potential hazard or immediate danger to the public, the following procedure will be followed:

The Director of Communications, with leadership approval, will coordinate all communications and will respond to all inquiries received at the incident site and at the Atlanta Office.

The Director of Operations, or in his absence, the ranking Operations Manager or other designated Company spokesperson, while awaiting the arrival of the Director of Communications, should make every effort to give factual, complete information to news media as soon as possible. The Colonial spokesperson should normally be the single source of information at the scene.

In the absence of the Director of Communications, the Director of Operations, or in his absence, the ranking Operations Manager or designated Colonial spokesperson, should expect the news media to arrive or call almost immediately, and should be prepared to respond to them. Any responses should provide only facts, but should emphasize and confirm that the Director of Communications will make a follow-up response. The following information should be released:

A general statement of the situation. Speculation or comment as to what caused the event must be avoided.
The number of Colonial and contractor response personnel involved.
The number of fatalities or people injured, if any, and where they were taken. Immediate families must be notified before releasing names of injured or dead employees, or other individuals to the news media. Statements as to the extent of injuries should not be made unless it is obvious they are minor and only first aid is required.
A brief, non-technical description of the damaged facilities and the functions they performed.

Only Corporate Communications is authorized to release information related to the monetary amount of damage, quantities of products involved, the time it may take to repair damages, the cause of the incident,

and the original cost of facilities or equipment. (When other company employees are asked for this type of information, the best and most honest reply is “I don’t know.” Rather than speculate, merely respond that Colonial will check on the facts and provide the information when available.)

The Director of Communications will:

Supervise the handling of all contacts with the media at a contingency site after arriving at the scene.
If necessary, set up a communications center to keep reporters together as a group to effect better coordination. Colonial facilities normally will not be used as pressrooms. Arrangements may be made at nearby hotels or public facilities.
If desired by reporters, a site tour may be arranged, but only after it is established that no hazards exists. Tours of any “warm” or “hot” zones must be coordinated with on-site safety personnel. Maximum cooperation possible, within limits of safety, will be given to reporters.
Oversee contacts with local government officials in the absence of the Government Relations Manager.
Oversee release of information about an incident to employees and retirees.
Coordinate issuance of news releases to the trade press and other mass media.
Maintain current media contact lists.
Prepare letters or other messages for distribution door-to-door or by mail in an accident impact area.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

SOUTHEAST RESPONSE ZONE

Colonial Pipeline Company utilizes an Incident Command System (ICS) when responding to emergencies. Colonial's ICS has been developed and modified from the generic Incident Command System based on Colonial's actual experiences and available resources.

Section 4.02 outlines the overall Incident Command System Structure utilized in each of Colonial's three response zones. Response zone personnel identified in the spill management team structure are the primary responders for their area of expertise. In the event of an incident, they will be in communication with on-site personnel to monitor events and relay instructions until their arrival at the scene. Additionally, a list of all trained personnel in the response zone can be found in Section 5.02.

Specific roles and responsibilities of positions within the ICS can be found via the link on the response plan webpage. Information accessible through the above referenced link details response structure positions as well as those not specifically depicted on the ICS structure chart. All positions are staffed by trained response zone and/or corporate personnel.

An ICS structure should be established as soon as possible during response to an incident. As responders listed on the affected Response Zone's ICS report to the incident command, they will assume the Section Leader roles as described in the structure.

In ICS, Unified Command is an integrated team effort that allows all agencies with responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, responsibility, or accountability.

The Unified Command is responsible for the overall management of the incident. It directs incident activities including the development and implementation of strategic decisions and approves the ordering and releasing of resources. The Unified Command may activate Deputy Incident Commanders to assist in carrying out Incident Command responsibilities.

Depending on the complexity of the emergency event, the Incident Commander may be organized under the Unified Command Structure which includes:

The pre-designated Federal On Scene Coordinator (FOSC) acting under the authority of the National Contingency Plan (NCP).
The pre-designated State On Scene Coordinator (SOSC) representing state and local response agencies.
Local Government.
The Responsible Party (RP) representing Colonial Pipeline Company.

The functions of a Unified Command are to:

Provide overall response direction.
Coordinate effective communication.
Coordinate resources.
Establish incident priorities.
Develop incident objectives.

Develop strategies to achieve objectives.
Assign objectives to response structure.
Review/approve incident action plans.
Ensure integration of response organization.
Establish protocols.

An ICS led by a Unified Command has been used to manage federal, state, and local responses to complex multi-agency, multi-jurisdictional incidents. The guidelines of the National Preparedness for Response Exercise Program – PREP (which were issued by the Department of Transportation, Department of the Interior, and the U.S. Environmental Protection Agency) describe the ICS as "the system to achieve the coordination necessary to carry out an effective and efficient response."

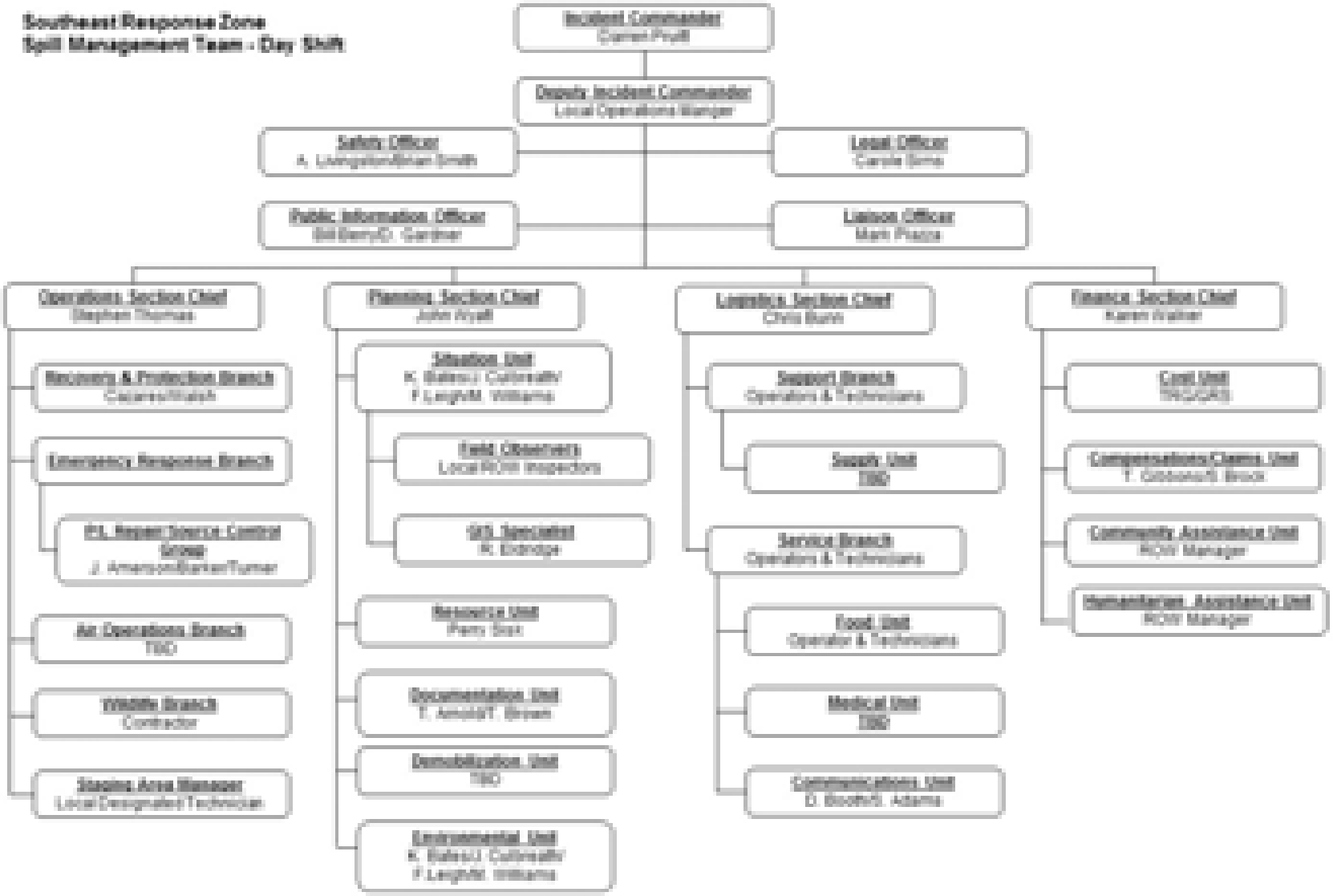
Advantages to using the ICS/UC include:

Optimization of combined efforts.
Elimination of duplicative efforts.
Establishment of one command post.
Development of collective approval of shared operations, logistics, planning, and finance.
Encouragement of cooperative response environment.
Allowance for shared facilities, which not only reduces costs for those responding, but also maximizes efficiency and reduces communication breakdowns.

The ICS/UC structure itself outlines responsibilities and functions (not people), therefore reducing potential conflicts, and improves information flow among all organizations. The ICS maintains its modular organizational structure, so that none of the advantages of the ICS are lost by the introduction of a Unified Command.

Colonial Pipeline Company

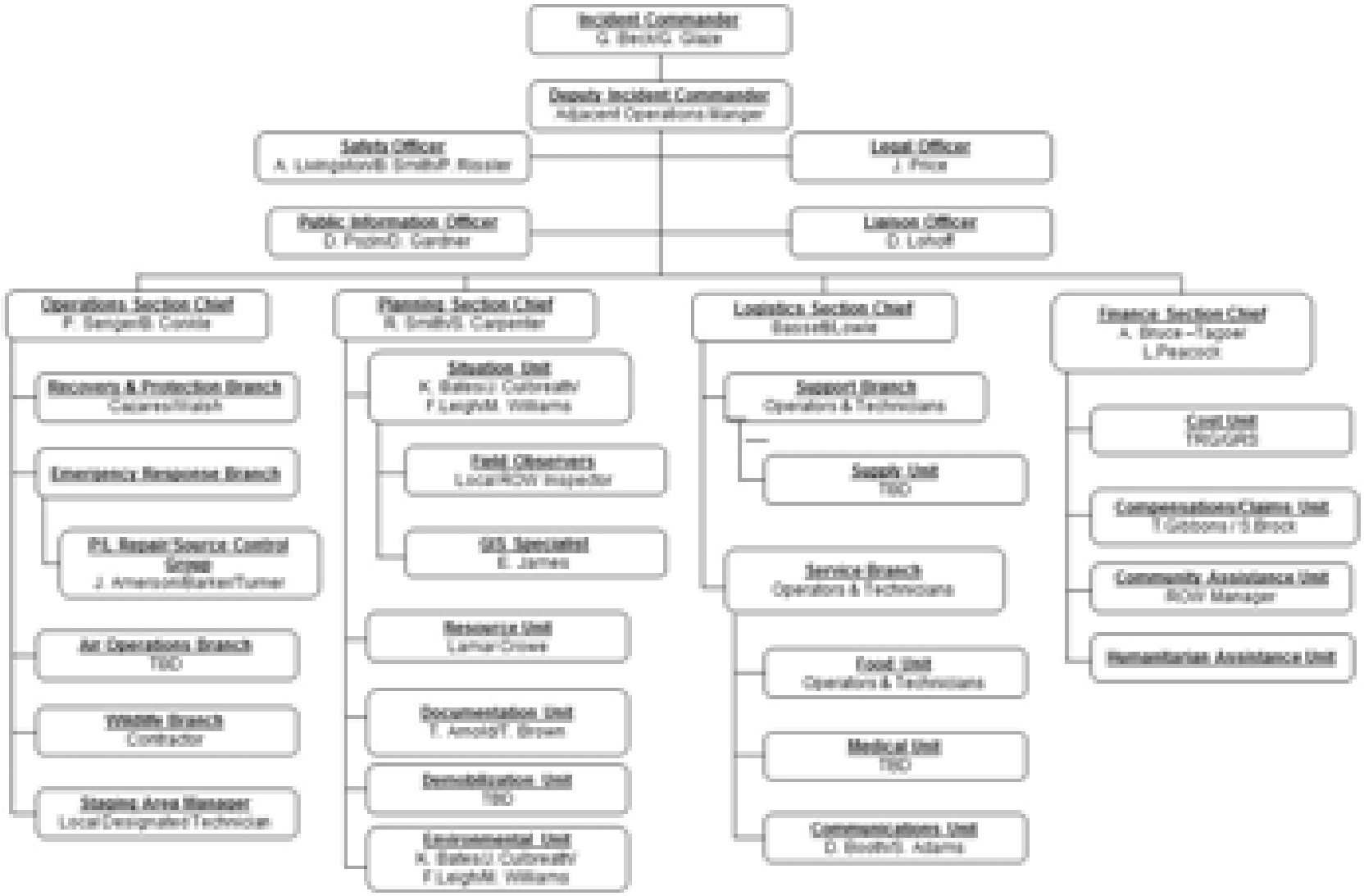
INCIDENT COMMAND SYSTEM AND STRUCTURE



Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

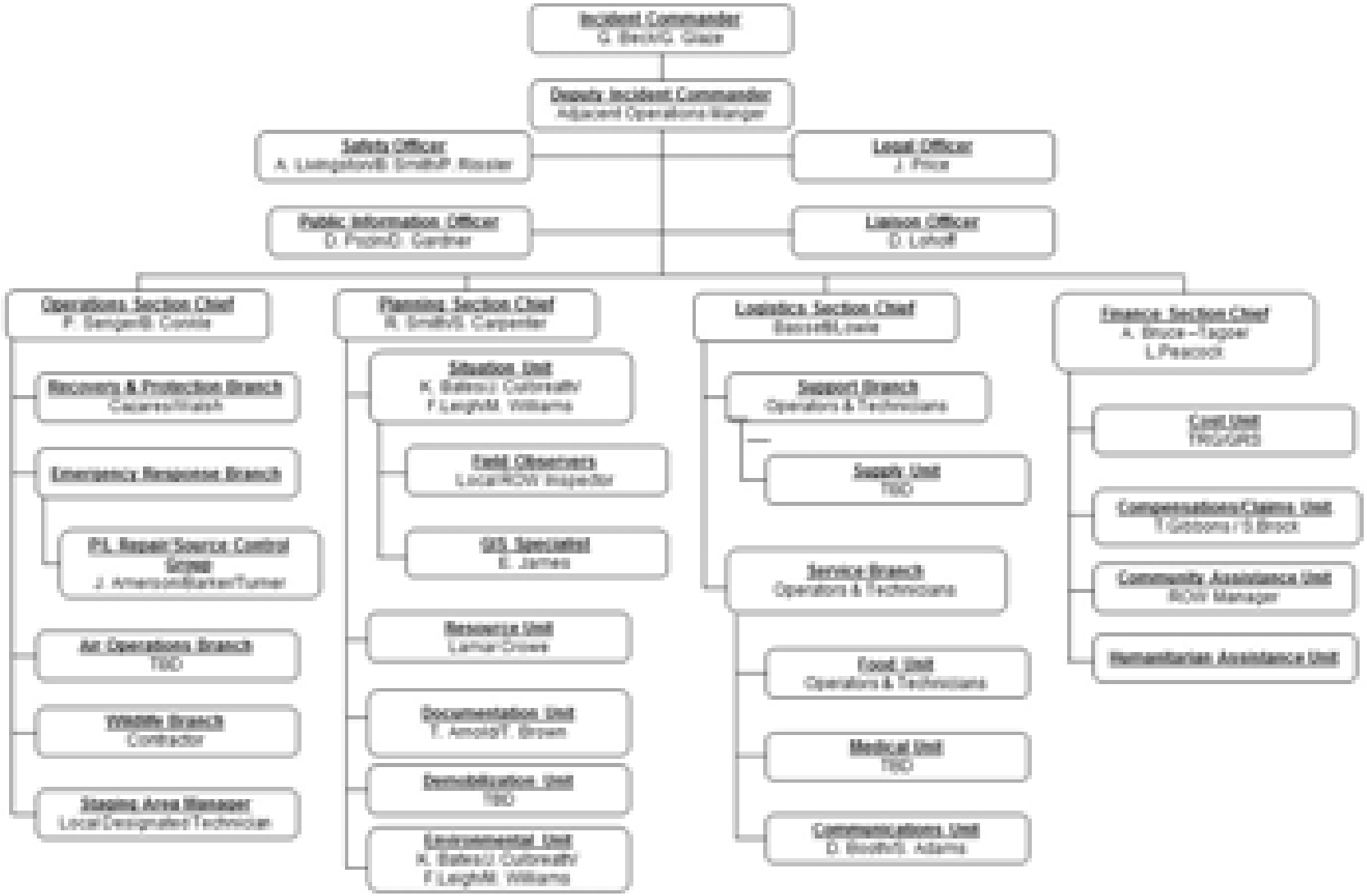
Southeast Response Zone
Spill Management Team – Night Shift



Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

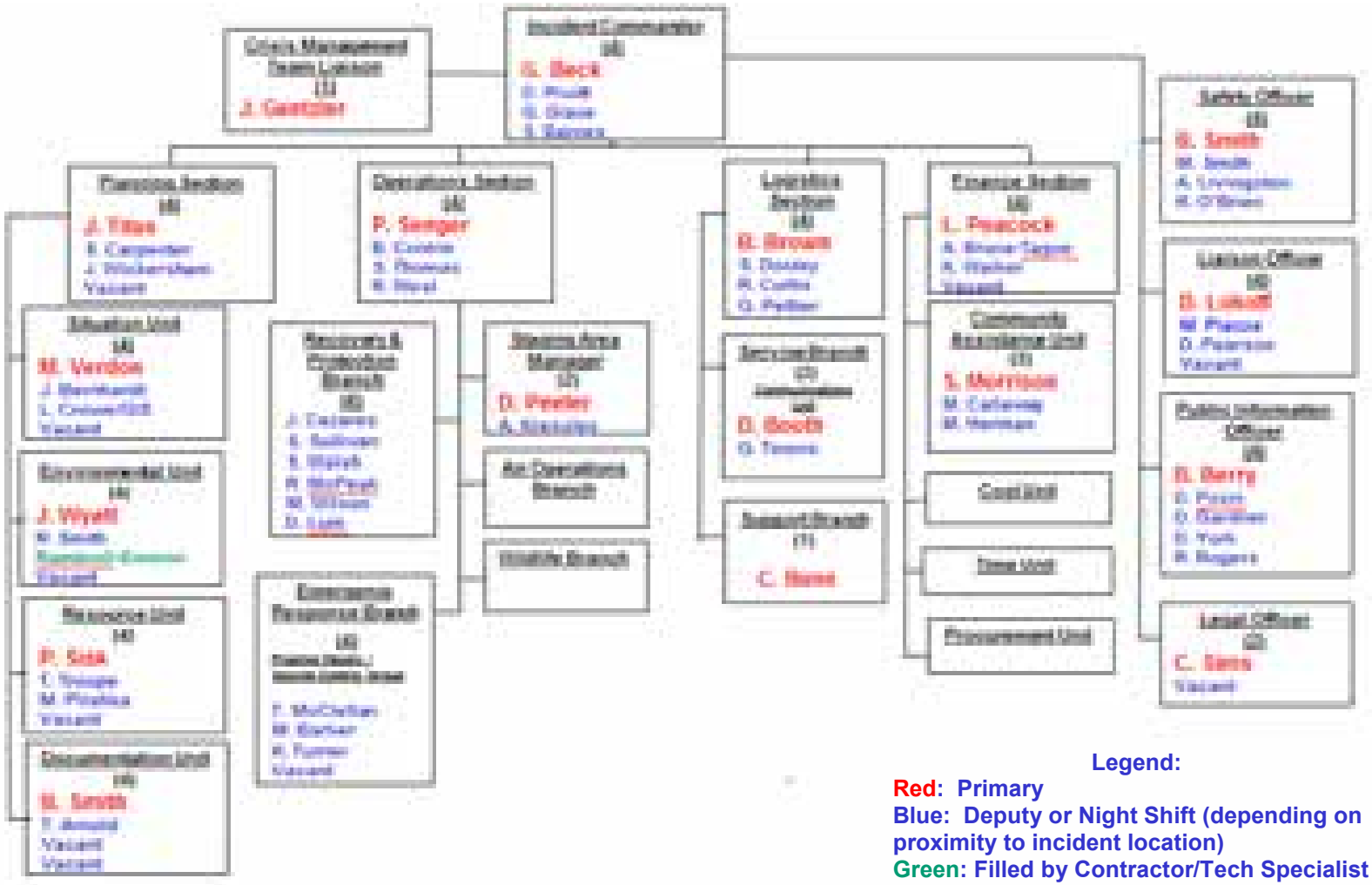
Southeast Response Zone
Spill Management Team – Night Shift



Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

Colonial Pipeline Strike Team



Legend:

Red: Primary

Blue: Deputy or Night Shift (depending on proximity to incident location)

Green: Filled by Contractor/Tech Specialist

(#): Denotes desired team depth

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMON ICS RESPONSIBILITIES

COMMON RESPONSIBILITIES FOR ALL ICS POSITIONS

	Responsibilities
	Receive assignment from your agency, including:
	Job assignment (e.g., Strike Team designation, position, etc.)
	Brief overview of type and magnitude of incident.
	Travel instructions including reporting location & response time.
	Any special communications instructions (e.g., travel, radio frequency).
	Monitor incident related information from media, internet, etc., if available.
	Assess personal equipment readiness for specific incident and climate (e.g., medications, money, computer, medical record, etc.). Maintain a checklist of items and possible a person Go-Kit.
	Inform others as to where you are going and how to contact you.
	Review Colonial Incident Management Handbook.
	Take advantage of available travel to rest prior to arrival.
	Upon arrival at the incident, check-in at the designated check-in location. Check-in may be found at any of the following locations:
	Incident Command Post (ICP), Base/Camps, Staging Areas, Helibases.
	If you are instructed to report directly to an on-scene assignment, check-in with the Division/Group Supervisor or the Operations Section Chief.
	Receive briefing from immediate supervisor.
	Agency Representatives from assisting or cooperating agencies report to the Government Liaison Officer (LNO) at the ICP after check-in.
	Acquire work materials.
	Abide by organizational code of ethics.
	Participate in IMT meetings and briefings as appropriate.
	Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety/Security Officer.
	Supervisors shall maintain accountability for their assigned personnel with regard as to exact location(s) and personal safety and welfare at all times, especially when working in or around incident operations.
	Organize and brief subordinates.
	Know your assigned communication methods and procedures for your area of responsibility and ensure that communication equipment is operating properly.
	Use clear text and ICS terminology (no codes) in all radio communications.
	Complete forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit.
	Ensure all equipment is operational prior to each work period.
	Report any sign/symptoms of extended incident stress, injury, fatigue or illness for yourself or co-workers to your supervisor.
	Brief shift replacement on ongoing operations when relieved at operational periods or rotation out.
	Respond to demobilization orders and brief subordinates regarding Demobilization.
	Prepare personal belongings for demobilization.
	Return all assigned equipment to the appropriate location.
	Complete Demobilization Check-out process before returning to home base.
	Participate in After-Action activities as directed.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMON ICS RESPONSIBILITIES

	Carry out assignments as directed.
	Upon demobilization, notify RESL at incident site or home unit of your safe return.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMAND SECTION

INCIDENT COMMANDER - IC &
DEPUTY INCIDENT COMMANDER - DEPUTY IC

Responsibilities

The Incident Commander's (IC) responsibility is the overall management of the incident. On most incidents, the command activity is carried out by a single IC but could be the UC particularly on larger incidents. The IC is selected by qualifications and experience. The IC may have one or more deputies, who may be from the same agency/organization, or from an assisting agency/organization. Deputies must have the same qualifications as the person for whom they work, as they must be ready to take over the position any time.

Checklist

	Review common responsibilities.
	Obtain a briefing from the prior IC (201 Briefing).
	Determine Incident Objectives & general direction for managing the incident.
	Establish the immediate priorities.
	Assess the situation and/or obtain a briefing from the prior Incident Commander.
	Communicate with the CMT as described in Section 2.01 of the ERP.
	Establish an ICP, assign to Logistics if activated.
	Brief and coordinate activity of Command Staff and General Staff.
	Establish an appropriate organization & set shift change schedule.
	Direct the completion of the ICS forms 201 and 202 and through the development and implementation of 12 hour or 24 hour Response Plan.
	Determine incident objectives and strategies in accordance with Area Contingency Plan(s) (ACP).
	Represent company as member of Unified Command.
	Ensure planning meetings are scheduled as required.
	Approve and authorize the implementation of an IAP.
	Ensure that adequate safety measures are in place.
	Seek appropriate legal counsel.
	Coordinate with key stakeholders and officials through the Liaison Officer.
	Approve requests for additional resources or for the release of resources.
	Ensure incident funding is available.
	Approve the use of trainees, volunteers, and auxiliary personnel.
	Authorize release of information to the news media through PIO.
	Ensure ICS 209 is completed and forwarded to appropriate higher authority.
	Order the demobilization of the incident when appropriate.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMAND SECTION

SAFETY OFFICER - SOFR

Responsibilities
The SOFR function is to develop and recommend measures for assuring personnel safety, and to assess and/or anticipate hazardous and unsafe situations. Only one primary SOFR will be assigned for each incident. The SOFR may have specialists, as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities, such as air operations, hazardous materials, etc.

	Checklist
	Review Common Responsibilities.
	Become familiar with all applicable National, State, and Local health and safety regulations.
	Obtain briefing from Incident Commander.
	Participate in tactics and planning meetings, and other meetings and briefings as required.
	During initial response, document the hazard analysis process addressing hazard identification, personal protective equipment, control zones, and decontamination area.
	Identify hazardous situations associated with the incident.
	Review the Incident Action Plan for safety implications.
	Provide safety advice in the IAP for assigned responders via the safety message on each ICS 204.
	Exercise emergency authority to stop and prevent unsafe acts.
	Investigate accidents that have occurred within the incident area.
	Assign assistants and manage the incident safety organization.
	Review and approve the medical plan (ICS Form 206).
	Ensure preparation and implementation of Site Safety and Health Plan (SSHP) (ICS Forms 201-5/208) in accordance with the Area Contingency Plan (ACP) and state and Federal OSHA regulations.
	Develop the Work Safety Analysis Worksheet (ICS 215A) as required.
	Participate in tactics meetings to identify any health and safety concerns inherent in the operations daily work plan.
	Ensure that all required agency forms, reports, and documents are completed prior to demobilization.
	Brief Command on safety issues and concerns.
	Have debriefing session with the IC prior to demobilization.
	Quality assurance of Site Safety Plan effectiveness.
	Pre-operations health and safety conference for all incident participants.
	The SSHP shall, at a minimum, address, include, or contain the following elements:
	Health and safety hazard analysis for each site task or operation using the Work Safety Analysis Worksheet (ICS 215A) as required.
	Comprehensive operations work plan.
	Personnel training requirements.
	PPE selection criteria.
	Site-specific occupational medical monitoring requirements.
	Air monitoring plan: area/personal.
	Site control measures.
	Confined space entry procedures "only if needed".
	Pre-entry briefings (tailgate meetings): initial and as needed.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMAND SECTION

PUBLIC INFORMATION OFFICER - PIO

Responsibilities

The Public Information Officer (PIO) is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations. Only one primary PIO will be assigned for each incident, including incidents operating under UC and multi-jurisdiction incidents. The PIO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. Agencies have different policies and procedures relative to the handling of public information.

Checklist

	Review Common Responsibilities.
	Determine from the IC if there are any limits on information release.
	Obtain briefing from the Incident Commander.
	Develop material for use in media briefings.
	Develop a local media list.
	Obtain IC/UC approval of media releases.
	Prepare prompt and informative news releases to inform the public and conduct media briefings.
	Prepare letters for door to door distribution.
	Update employees through E-Mail/bulletins.
	Arrange for tours and other interviews or briefings that may be required.
	Establish and maintain a Joint Information Center as necessary.
	Implement applicable ACP JIC/PIO policies and procedures.
	Obtain media information that may be useful to incident planning.
	Maintain current information summaries and/or displays on the incident and provide information on the status of the incident to assigned personnel.
	Ensure that all required agency forms, reports, and documents are completed prior to demobilization.
	Brief Command on PIO issues and concerns.
	Monitor incident status to maintain current knowledge of events and progress.
	Monitor media for accuracy, correct as necessary.
	Have debriefing session with the IC prior to demobilization.
	Complete Media Contact and Community Inquiry reports as necessary.
	Utilize consultants handling media and community relations.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMAND SECTION

LIAISON OFFICER - LNO

Responsibilities

Incidents that are multi-jurisdictional, or have several agencies involved, may require the establishment of the LNO position on the Command Staff. Only one primary LNO will be assigned for each incident, including incidents operating under UC and multi-jurisdiction incidents. The LNO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. The LNO is assigned to the incident to be the contact for assisting and/or cooperating Agency Representatives.

	Checklist
	Wear position identification vest.
	Review Common Responsibilities.
	Obtain briefing from the Incident Commander.
	Verify notifications to all appropriate agencies have been made and log agency, date/time of notification, and case number assigned.
	Establish a Liaison area near the Command Center to assist local government agencies.
	Be a contact point for non-jurisdictional agencies, NGOs, special interest groups, or other organizations seeking input to the response.
	Obtain input on issues and concerns form above organizations, vet with appropriate response personnel, and communicate resolutions back to the organizations.
	Make required and courtesy notifications to regulatory agencies and potentially affected parties as requested by the IC.
	Identify and interface with the appropriate State and Federal response organizations.
	Implement applicable ACP policies and procedures.
	As necessary, identify and interface with the appropriate local, state, and federal elected officials who represent the affected area.
	Maintain a list of assisting and cooperating agencies and Agency Representatives, including name and contact information. Monitor check-in sheets daily to ensure that all Agency Representatives are identified.
	Assist in establishing and coordinating interagency contacts.
	Keep agencies supporting the incident aware of incident status.
	Monitor incident operations to identify current or potential inter-organizational problems.
	Call, visit, and/or greet and brief elected officials.
	Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
	Coordinate resource needs for incident investigation activities with the OSC.
	Provide ongoing briefings and forward concerns to the Command Center.
	Monitor activities and establish/update briefing charts.
	Coordinate response resource needs for Natural Resource Damage Assessment and Restoration (NRDAR) activities with the OSC during oil and HAZMAT responses.
	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
	Work with the volunteer Coordinator to ensure volunteer training and activities are aligned with direction provided by the IC/UC.
	Brief Incident Commander/Command on agency issues and concerns.
	Have debriefing session with the IC prior to departure/demobilization.
	Coordinate activities of visiting dignitaries.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMAND SECTION

	DOT COMPLIANCE
	Obtain briefing from Incident Commander.
	Don position identification vest.
	Gather data concerning the cause of the incident as required on PHMSA/OPS Accident investigation form.
	Serve as liaison for Office of Pipeline Safety and National Transportation Safety Board.
	Document the excavation and removal of damaged pipe/equipment by photography, video, and/or written report.
	Arrange for the shipment of the damaged pipe/equipment and develop a chain of custody for shipment.
	Ensure the repair of the pipeline/equipment is performed in accordance with applicable governmental regulations.
	Brief DOT/PHMSA personnel using ICS Form 201.
	Coordinate response resource needs for incident investigation activities with PHMSA/OPS.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMAND SECTION

LEGAL OFFICER*	
Responsibilities	
The Legal Officer is responsible for providing advice and direction on matters of a legal nature including legal requirements relating to the emergency response, investigations, Natural Resource Damage assessment (NRDA), major procurement contracts, and review of information releases to the media, government agencies, and the public[1]	
Checklist	
	Review Common Responsibilities
	Obtain briefing from the Incident Commander
	Advise the Incident Commander (IC) and the Unified Command (UC), as appropriate, on legal issues associated with response operations (only applicable as to advising Colonial members)
	Provide advice regarding response activity documentation to the response team
	Provide legal input to the Documentation Unit, the Compensation/Claims Unit, and other appropriate Units as requested
	Review press releases, documentation, contracts, and other matters that may have legal implications for the Company
	Participate in Incident Command System (ICS) meetings and other meetings, as requested
	Participate as appropriate in incident investigations and the assessment of damages (including natural resource damage assessments)
	Maintain Individual/Activity Log (ICS Form 214a)

*Legal Officer will be dispatched to Incident Command Center for incidents meeting the following criteria:

A spill that causes, or is likely to cause, death and serious bodily injury.
A spill greater than 1,000 gallons which reaches, or is likely to reach, waters.
A spill in which a NTSB investigation is initiated, or is likely to be initiated.
A spill in which a DOJ or EPA investigation or enforcement action is initiated, or is likely to be initiated.
A spill in which a class action or multiple toxic tort claims are filed, or is likely to be filed.
A spill with national media interest, or local media interest, lasting or likely to last, beyond the initial response.
A spill with the General Counsel or Incident Commander determines is advisable to have Legal resources located at the Incident Command Center.

[1] The Legal Officer will provide advice as requested and appropriate; however, certain of these functions may be normally handled by others at the Incident Command. For instance, advice and direction relating to the legal nature of claims and insurance coverage will normally be handled by the Compensation/Claims Unit Leader.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
COMMAND SECTION

INTELLIGENCE/SECURITY OFFICER - INTO	
Responsibilities	
The responsibility of the INTO is to provide Command intelligence information that can have a direct impact on the safety of response personnel and influence the disposition of maritime security assets involved in the response.	
Checklist	
	Collect and analyze incoming intelligence information from all sources.
	Determine the applicability, significance, and reliability of incoming intelligence information.
	As requested, provide intelligence briefings to the IC/UC.
	Provide intelligence briefings in support of the Incident Command System Planning Cycle.
	Provide Situation Unit with periodic updates of intelligence issues that impact the incident response.
	Answer intelligence questions and advise Command and General Staff as appropriate.
	Review the IAP for intelligence implications.
	Supervise, coordinate, and participate in the collection, analysis, processing, and dissemination of intelligence.
	Assist in establishing and maintaining systematic, cross-referenced intelligence records and files.
	Establish liaison with all participating law enforcement agencies including the CGIS, FBI/JTTF, State, and Local police departments.
	Conduct first order analysis on all incoming intelligence and fuse all applicable incoming intelligence with current intelligence holdings in preparation for briefings.
	Prepare all required intelligence reports and plans.
	As the incident dictates, determine need to implant Intelligence Specialists in the Planning and Operations Sections.
	Ensure that all required agency forms, reports, and documents are completed prior to demobilization.
	Have debriefing session with the IC prior to demobilization.
	Maintain Individual Activity Log (ICS Form 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
FINANCE SECTION

FINANCE SECTION CHIEF – FSC
DEPUTY FINANCE SECTION CHIEF – Deputy FSC

Responsibilities

The FSC, a member of the General Staff, is responsible for all financial, administrative, and cost analysis aspects of the incident and for supervising members of the Finance/Admin Section. The FSC may have Deputy FSC's, who may be from the same organization or from an assisting agency. The Deputy FSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Checklist

	Review Common Responsibilities.
	Obtain Briefing from Incident Commander.
	Assess and ensure the adequacy of financial internal controls at the incident site.
	Manage all financial aspects of an incident.
	Participate in incident planning meetings and briefings as required.
	Review operational plans and provide alternatives where financially appropriate.
	Assure that cost tracking services are provided prior to the arrival of a third party cost monitoring service group.
	Evaluate the need for third party monitoring services.
	Assess staffing requirements of third party monitoring services.
	Provide on-site management of third party monitoring services.
	Provide financial and cost analysis information as requested.
	Prepare contracts with vendors or contractors as requested by Logistics.
	Maintain communications with Logistics/Staging.
	Inform Incident Commander of scheduled actions taken during briefings.
	Inform Incident Commander of cost estimates related to the leak, as requested.
	Gather information to discuss leak related cost estimates with Incident Commander.
	Facilitate communication of leak related cost estimates to the appropriate corporate office personnel, as requested.
	Serve as liaison at staging for the Shared Services and Financial Services Teams.
	Coordinate with Procurement to obtain contractor rates/contract adjustments as needed.
	Coordinate efforts with the Atlanta finance team to request limits be raised on employee credit cards, if needed.
	Assign accounting tracking number(s) for incident and assure appropriate use of the tracking number.
	Serve as financial point of contact for costs incurred at site.
	Facilitate processing of invoices once approved by appropriate field personnel.
	Gather information to discuss leak related cost estimates with Corporate Office as requested.
	Participate with procurement in third party administrative monitoring services contractor negotiations.
	Coordinate with Financial Manager at Corporate Office to assure that leak-related and insurance recovery costs are properly recorded.
	Gather pertinent information from briefings with responsible agencies.
	Maintain daily contact with assisting/cooperating agency(s) on Finance/Admin matters.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
FINANCE SECTION

	Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
	Provide financial input to demobilization planning including recommending priorities for resources to be demobed based on cost considerations.
	Ensure that all obligation documents initiated at the incident are properly prepared and completed.
	Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
	Develop recommended list of Section resources to be demobed and initial recommendation for release when appropriate.
	If required, develop IAP interface to track costs in Accounting System.
	Receive and implement applicable portions of the incident Demobilization Plan.
	Maintain Individual/Activity Log (ICS Form 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
FINANCE SECTION

COST UNIT LEADER – COST	
Responsibilities	
The Cost Unit Leader (COST) is responsible for collecting all cost data, performing cost effectiveness analyses, and providing cost estimates and cost saving recommendations for the incident.	
Checklist	
	Review Unit Leader Responsibilities.
	Obtain a briefing from the Finance Section Chief.
	Coordinate with business unit/organization management on cost reporting procedures.
	Collect and record all cost data.
	Develop incident cost summaries.
	Prepare resources use cost estimates for the Planning Section.
	Make cost saving recommendations to the Finance Section Chief.
	Ensure all cost documents are accurately prepared.
	Maintain cumulative incident cost records.
	Complete all records prior to demobilization.
	Provide reports to the Finance Section Chief.
	Maintain Individual/Unit Log (ICS 214a/214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
FINANCE SECTION

TIME UNIT LEADER – TIME	
Responsibilities	
The Time Unit Leader (TIME) is responsible for equipment and personnel time recording.	
Checklist	
	Review Unit Leader Responsibilities.
	Determine incident requirements for time recording function.
	Determine resource needs.
	Contact each responding organization management to ensure daily personnel time records are prepared and in compliance with their policies.
	Establish time unit objectives.
	Maintain separate logs for overtime hours.
	Submit cost estimate data forms to the Cost Unit, as required.
	Maintain records security.
	Ensure that all records are current and complete prior to demobilization.
	Release time reports for responders to their respective management representatives prior to demobilization.
	Brief the Finance Section Chief on current problems and recommendations, outstanding issues, and follow-up requirements.
	Maintain Individual/Unit Log (ICS 214a/214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
FINANCE SECTION

PROCUREMENT UNIT LEADER – PROC	
Responsibilities	
The PROC is responsible for administering all financial matters pertaining to vendor contracts, leases, and fiscal agreements.	
Checklist	
	Review Common Responsibilities.
	Review Unit Leader Responsibilities.
	Review incident needs and any special procedures with Unit Leaders, as needed.
	Coordinate with local facility or business unit managers on potential contractors and supply sources.
	Ensure procurement procedures are compliant with the incident Finance Guidelines.
	Prepare and authorize contracts, building, and land-use agreements.
	Draft memoranda of understanding, as necessary.
	Establish contracts and agreements with supply vendors.
	Provide for coordination between the Supply Unit and all other procurement organizations supporting the incident.
	Develop a property management system that meets company requirements and accounts for all new property.
	Interpret contracts and agreements; resolve disputes within delegated authority.
	Coordinate with the Compensation/Claims Unit for processing claims.
	Complete final processing of contracts and send documents for payment.
	Coordinate cost data in contracts with the COST.
	Brief the FSC on current problems and recommendations, outstanding issues, and follow-up requirements.
	Maintain Individual/Unit Log (ICS 214a/214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
FINANCE SECTION

COMPENSATION/CLAIMS UNIT LEADER – COMP

Responsibilities	
The COMP is responsible for the overall management and direction of all administrative matters pertaining to compensation for injury and claims related activities (other than injury) for an incident.	
Checklist	
	Review Common and Unit Leader Responsibilities.
	Obtain briefing from Finance Section Chief.
	Activate appropriate personnel and insurance/claims manager.
	Activate third party administrator/claims unit.
	Establish Claims Center with appropriate communication system.
	Assess the scope of the incident and potential damages/claims.
	Develop list of possible affected parties/property owners and contact as appropriate.
	Document and preserve evidence/information by all available means (video, photos, etc.).
	Consult with Safety/Security to determine role in cause investigation.
	Obtain settlements from injured and damaged parties.
	Interface with the appropriate state and federal response organizations.
	Notify insurance brokers as applicable.
	Arrange for emergency care and housing of affected parties.
	Identify and list nearest hospitals/claims to the area and arrange for handling of affected parties as necessary.
	Compile list of claimants including claim details and CPC response.
	Update Finance Section Chief as necessary.
	Ensure that all Compensation for Injury and Claims logs and forms are complete and routed to the appropriate agency for post-incident processing prior to demobilization.
	Keep the FSC briefed on Unit status and activity.
	Demobilize unit in accordance with the Incident Demobilization Plan.
	Maintain Unit Log (ICS 214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
OPERATIONS SECTION

OPERATIONS SECTION CHIEF - OSC
DEPUTY OPERATIONS SECTION CHIEF - DEPUTY OSC

Responsibilities

The Operations Section Chief (OSC), a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission. The OSC activates and supervises operational elements in accordance with the IAP and directs its execution. The OSC also directs the preparation of Unit operational plans, requests or releases resources, makes expedient changes to the IAP, as necessary, and reports such to the IC. The OSC may have one or more Deputy OSCs and may assign a Deputy OSC or On-Scene Commander to supervise on-scene operations.

Checklist

	Review Common Responsibilities.
	Obtain briefing from IC.
	Ensure public safety is communicated to be the top priority at all times.
	Ensure that each Site Supervisor holds a pre-work safety meeting.
	Request sufficient section staffing for both Operations and Planning activities consistent with the Emergency Response Plan.
	Pipeline Repair Leader, Branch Director(s), Site Supervisor(s), and Waste Disposal positions and brief them on their roles. Fill in organization chart.
	Verify that the source has been contained and that all adjacent pipelines have been shut down.
	Ensure Site Safety and Health plan (including O_2, TPH, and LEL readings) is completed for each site.
	Determine if mobilization of additional personnel and/or response equipment is necessary.
	Communicate with Safety, Planning, and Logistics/Staging.
	Request sufficient Section supervisory staffing for both ops and planning activities.
	Subdivide work areas into manageable units/Areas of Operation and define the areas of operations and appropriate zone for each OSRO.
	Work with Planning Section Chief to ensure that all sites are named for identification purposes.
	Ensure that all personnel have been HAZWOPER trained and have the appropriate Documentation.
	Follow Resource Tracking Process.
	Document initial callout of resources and personnel on ICS-201-4 "Resource Summary" and provide updates to the Resource Unit Leader.
	Ensure status board with personnel and equipment at each site is displayed on Command Center wall.
	Convert operational incident objectives into strategic and tactical options through a work analysis matrix.
	Prepare ICS 234 Work Analysis Matrix with PSC to convert operational objectives into strategic and tactical options and ensure those options are in line with ICS 202 Response Objectives.
	Coordinate and consult with the PSC, SOFR, technical specialists, modeling scenarios, trajectories, etc., on selection of appropriate strategies and tactics to accomplish objectives.
	Identify kind and number of resources required to support selected strategies.
	Develop reactive phase work assignments and allocate tactical resources based on strategy requirements.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
OPERATIONS SECTION

	Coordinate planned activities with the SOFR and appropriate agency representatives to ensure compliance with safety practices.
	Prepare, in conjunction with RESL and others, the ICS 215 Operational Planning Worksheet using tactics and work areas identified on the ICS 234 Work Analysis Matrix.
	Participate in the planning process and the development of the tactical portions (Areas of Operation, ICS 204, ICS 209 (mass balance and waste management)) of the IAP.
	Assist with development of long-range strategic, contingency, and demobilization plans.
	Supervise Operations Section personnel.
	Monitor need for and request additional resources to support operations.
	Evaluate/monitor current situation for use in next operational period planning.
	Interact and coordinate with Command on achievements, issues, problems, significant changes special activities, events, and occurrences.
	Troubleshoot operational problems with other IMT members.
	Implement the IAP for the Operations Section.
	Evaluate on-scene operations and adjust operations organization, strategies, and tactics as necessary.
	Ensure the Resource Unit is advised of changes in the status of resources assigned to the section.
	Investigate the possibility of using a USCG approved dispersant to facilitate recovery operations.
	Investigate the possibility of halting all river traffic in affected area.
	Utilize knowledge and experience of Federal, State, and Local Government agency representatives and assign in appropriate position within IC.
	Establish hourly communications schedule for each site – preferably 45 minutes after the hour.
	Work with logistics to effectively distribute equipment at staging to various recovery sites.
	Ensure that proper PPE is available and worn by all necessary personnel.
	Communicate overall objectives of response effort to Operations personnel.
	Provide any digital photographs to the Documentation Unit Leader.
	Determine final destination for recovered product.
	Advise Incident Commander of any significant changes in situation status.
	Ensure the Operations Section personnel execute work assignments following approved safety practices.
	Supervise and adjust operations organization and tactics as necessary.
	Participate in operational briefings to IMT members as well as briefings to media and visiting dignitaries.
	Assemble/dissemble task force/strike teams as appropriate.
	Identify/utilize staging areas.
	Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
	Receive and implement applicable portions of the incident Demobilization Plan.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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RECOVERY AND PROTECTION BRANCH DIRECTOR – RPBD	
Responsibilities	
The Recovery and Protection Branch Director (typically activated only for oil spills) is responsible for overseeing and implementing the protection, containment, and cleanup activities established in the IAP.	
Checklist	
	Identify Divisions, Groups, and resources assigned to the Branch.
	Obtain briefing from OSC/DOSC/On-scene Commander and person you are relieving.
	Implement IAP for Branch by assigning specific work tasks.
	Develop with subordinates alternatives for Branch control operations.
	Review Division/Group Assignment Lists (ICS 204) for Divisions/Groups within the Branch. Modify lists based on effectiveness of current operations.
	Attend planning meetings at request of the OSC/DOSC/On-scene Commander.
	Ensure through chain of command that Resources Unit is advised of changes in the status of resources assigned to the Branch.
	Report to OSC/DOSC/On-scene Commander when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
	Approve accident and medical reports originating within the Branch.
	Consider demobilization well in advance.
	Debrief with OSC/DOSC and/or as directed at the end of each shift.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
OPERATIONS SECTION

EMERGENCY RESPONSE BRANCH DIRECTOR – ERBD	
Responsibilities	
The Emergency Response Branch Director is primarily responsible for overseeing and implementing emergency measures to protect life, mitigate further damage to the environment, and stabilize the situation.	
Checklist	
	Review Branch Director Responsibilities.
	Develop with subordinates alternatives for Branch control operations.
	Attend planning meetings at the request of the OSC/DOSC/On-scene Commander.
	Review Division/Group Assignment Lists (ICS Form 204) for Divisions/Groups within the Branch. Modify lists based on effectiveness of current operations.
	Assign specific work tasks to Division/Group Supervisors.
	Report to OPS when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
	Approve accident and medical reports (home agency forms) originating within the Branch.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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P/L REPAIR/SOURCE CONTROL GROUP SUPERVISOR

Responsibilities

Under the direction of the Emergency Response Branch Director, the P/L Repair/Source Control Group Supervisor is responsible for coordinating and directing all salvage/source control activities related to the incident in compliance with the IAP.

Checklist

	Review Division/Group Supervisor Responsibilities.
	Coordinate the development of P/L Repair/Source Control Plan.
	Determine P/L Repair Source Control resource needs.
	Direct and coordinate implementation of the Salvage/Source Control Plan.
	Manage dedicated P/L Repair/Source Control resources.
	Consult with Engineering Services as necessary.
	Acquire special road permits, if necessary, for transportation of heavy equipment/supplies.
	Coordinate SAFE and effective repairs to pipeline/equipment by considering the following:
	Equipment capable for monitoring the atmosphere for oxygen and lower explosive limits will be maintained during all repair activities.
	Trenching and excavation standards as established by OSHA must be maintained. This standard requires a person competent in trenching and excavation to be on site.
	Free repair area of flammable vapor or other hazards before repairs are started.
	Utilize a minimum of personnel and equipment to accomplish the repair.
	Man fire extinguishers at all times until repairs have been completed.
	De-energize cathodic protection rectifiers on each side of the repair area.
	Keep the Controller advised of the situation, the feasibility of continuing to operate, proposed plan of action, and estimated time to accomplish the repair.
	A state of emergency will exist along with the entire operating line until such time as the Area Manager advises the Controller that the repair is complete.
	Give particular care to location and use of excavating and other equipment in relation to vapor/air movement and other operating pipelines.
	Isolate line segment by closing block valves and physically locking out.
	Drain product from the section of line to be repaired.
	Have bonding cables in place before line cuts are made.
	Make all pipe cuts in the line "cold" using pipe saw or mechanical cutters.
	Inject nitrogen or CO_2 into the pipe through the cut as soon as entry can be gained. Caution when using nitrogen or carbon dioxide, low pressure shall be used to avoid generation of static electricity. If portable carbon dioxide extinguishers are used the extinguisher must be grounded to the pipe before discharging (Continuous monitoring of oxygen levels is necessary during this process due to nitrogen and CO_2 depleting/displacing oxygen).
	After section has been removed, position spheres at least two feet from the open ends of the pipeline and inflate them with water to seal vapors from the work area.
	New section of pipe to be installed must be pre-tested hydrostatically to at least the same pressure as was required.
	Load sufficient dry ice to last the duration of the repair into the new pipe section before the pipe is clamped into place for welding.
	Back welding procedures requiring entry into an open pipeline are not permitted.
	Update Operations on activities and progress as necessary.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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	Ensure the repair of the pipeline/equipment is performed in accordance with applicable industry/ governmental standards.
	Ensure that affected pipeline segment is not disturbed until authorized.
	Ensure that appropriate firefighting equipment is on site and personnel are trained in its use.
	Take numerous digital photographs of the undisturbed site (from all angles).
	Take numerous digital photographs of the repair efforts once authorized to proceed.
	Communicate with Situation Unit Leader on an hourly basis regarding status.
	Ensure welders have current Colonial documentation (gold cards) and are using appropriate welding techniques as per Colonial's Maintenance Manual.
	Contact Engineering System Integrity Team regarding proposed method of repair for their concurrence.
	Be aware of the operational status of any adjacent pipelines.
	Check area for any underground facilities.
	Clearly mark any underground facilities and any above ground obstructions (telephone and power lines, etc.).
	Ensure that an emergency 1-call is made and properly documented.
	Ensure that any adjacent rectifiers have been deactivated.
	Ensure that the affected pipeline is double blocked on both the upstream and downstream sides of the release and that all lockout-tagout documentation is complete before starting work.
	Obtain purchase order and hydrotest records for the new section of pipe to be installed.
	Assign a Colonial employee as a full-time Safety Monitor.
	Insure that the appropriate MSDS sheets are present at the site.
	Utilize satellite phones or OSRO communications system if necessary.
	Utilize ICS 204 form as a site work plan.
	Hold a pre-work safety meeting for all personnel.
	Ensure Site Safety and Health plan completed for site including O_2, TPH, and LEL readings.
	Ensure that all Colonial employees wear their Colonial ID Badge on the exterior of their clothing.
	Ensure that all personnel at the site have the appropriate HAZWOPER training and documentation.
	Coordinate the development of Salvage/Source Control Plan.
	Determine Salvage/Source Control resource needs.
	Direct and coordinate implementation of the Salvage/Source Control Plan.
	Manage dedicated salvage/Source Control resources.
	Maintain Individual/Activity Log (ICS Form 214a).

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AIR OPERATIONS BRANCH DIRECTOR - AOBD

Responsibilities

The AOBD is ground-based and is primarily responsible for preparing the air operations portion (ICS 220) of the IAP and for providing logistical support to incident aircraft. The AOBD will ensure that agency directives, to include COMDTINST M3710.1e, flight manuals, unit restrictions, and other agency directives will not be violated by incident aircraft, e.g., flight hours, hoist limitations, night flying, etc. After the IAP is approved, the AOBD is responsible for overseeing the tactical and logistical assignments of the Air Operations Branch. In coordination with the Logistics Section, the AOBD is responsible for providing logistical support to aircraft operating on the incident.

Checklist

	Review Common Responsibilities.
	Organize preliminary air operations.
	Coordinate airspace use with the FAA. Request declaration (or cancellation) of Temporary Flight Restriction (TFR) IAW FAR 91.173 and post Notice to Airmen (NOTAM) as required.
	Attend the tactics and planning meetings to obtain information for completing ICS 220.
	Participate in preparation of the IAP through the OSC/DOSC. Ensure that the air operations portion of the IAP takes into consideration the Air Traffic Control requirements of assigned aircraft.
	Coordinate with the COML to designate air tactical and support frequencies.
	Perform operational planning for air operations.
	Prepare and provide Air Operations Summary Worksheet (ICS 220) to the Air Support Group and Fixed-Wing Bases.
	Supervise all air operations activities associated with the incident.
	Evaluate helibase and helispot locations.
	Establish procedures for emergency reassignment of aircraft.
	Coordinate approved flights of no-incident aircraft in the TFR.
	Coordinate Coast Guard air assets with the appropriate Command Center(s) through normal channels on incident air operations activities.
	Consider request for logistical use of incident aircraft.
	Report to the OSC/DOSC on air operations activities.
	Report special incident/accidents.
	Develop Aviation Site Safety Plan in concert with SOFR.
	Arrange for an accident investigation team when warranted.
	Debrief with OSC/DOSC as directed at the end of each shift.
	Maintain Individual Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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WILDLIFE BRANCH DIRECTOR

Responsibilities

The Wildlife Branch Director is responsible for minimizing wildlife injuries during spill responses; coordinating early aerial and ground reconnaissance of the wildlife at the spill site and reporting results to the SUL; advising on wildlife protection strategies, including diversionary booming placements, in-situ burning, and chemical countermeasures; removing of oiled carcasses, employing wildlife hazing measures as authorized in the IAP; and recovering and rehabilitating impacted wildlife. A central Wildlife Processing Center should be identified and maintained for evidence tagging, transportation, veterinary services, treatment and rehabilitation storage, and other support needs. The activities of private wildlife care groups, including those employed by the RP, will be overseen and coordinated by the Wildlife Branch Director.

Checklist

	Review Branch Director Responsibilities.
	Develop the Wildlife Branch portion of the IAP.
	Supervise Wildlife Branch operations.
	Determine resource needs.
	Review the suggested list of resources to be released and initiate recommendation for release of resources.
	Assemble and disassemble teams/task forces assigned to the Wildlife Branch.
	Report information about special activities, events, and occurrences to the OPS.
	Assist the Volunteer Coordinator and Training Specialist in determining training needs of wildlife recovery volunteers.
	Conduct all wildlife protection, recovery, and rehabilitation activities in compliance with the IAP.
	RECOVERY
	Determine resource needs.
	Establish and implement protocols for collection and logging of impacted wildlife.
	Coordinate with Planning Section and NRDA Advisor to conduct aerial and ground surveys of wildlife in the vicinity of the spill.
	Deploy acoustic and visual wildlife hazing equipment as needed.
	Coordinate transportation of wildlife to processing station(s).
	REHABILITATION
	Determine resource needs and establish processing station for impacted wildlife.
	Process impacted wildlife and maintain logs.
	Collect numbers/types/status of impacted wildlife.
	Conduct triage, stabilization, treatment, and rehabilitation of impacted wildlife.
	Coordinate transport of wildlife to other facilities.
	Coordinate release of recovered wildlife.
	Implement demobilization plan.
	Maintain Individual Activity log (ICS Form 214a).

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STAGING AREA MANAGER – STAM

Responsibilities

The Staging Area Manager is responsible for managing all activities within a Staging Area which includes establishing, maintaining, check-in, storage, and distribution of resources at staging. The Staging Area Manager works closely with the Security Manager, Resource Unit, Operations, and Logistics. Several staging areas may be required depending on the incident.

	Checklist
	Review Common Responsibilities.
	Proceed to Staging Area.
	Obtain briefing from person you are relieving, if applicable.
	Establish Staging Area layout which may include storage of equipment, fueling, decontamination of equipment, issuing of tools and PPE to the field, etc.
	Determine any support needs for equipment, feeding, sanitation, and security and provide to Staging Branch Director or Logistics Section Chief.
	Maintain and provide status to Staging Branch Director or Resource Unit of all resources in Staging Area(s).
	Request maintenance service for equipment at Staging Area as appropriate.
	Establish check-in/out functions using the ICS 211p (personnel) and 211e (equipment) forms as well as the ICS 210 Change of Status form.
	Ensure security of staged resources.
	Post areas for identification and traffic control.
	Designate a Check-in Recorder to perform check-in/out function at larger staging areas or Incident Command Post if necessary.
	Respond to request for resource assignments (Note: This may be direct from the OSC or Staging Branch Director).
	Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area.
	Determine required resource levels from the OSC/DOSC.
	Maintain and provide status to STAM and/or Resource Unit of all resources.
	Coordinate with Staging Branch Director or Logistics Section regarding staging requirements for ordered and en-route resources.
	Demobilize Staging Area in accordance with the Incident Demobilization Plan.
	Service and prepare equipment for the next operational period.
	Maintain Staging Area in orderly condition.
	Debrief with OSC/DOSC or as directed at the end of each shift.
	Establish Staging Area has:
	Communications available.
	Easy access for response equipment.
	Convenient to recovery sites.
	Size to accommodate large amounts of equipment and supplies.
	Access to food and lodging.
	Develop and implement traffic control plan.
	Establish entrance checkpoint.
	Establish exit checkpoint.
	Directions.

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	Maps developed by Incident Command should be distributed, showing the spill site, command center, and recovery sites.
	Develop a Staging Command Structure:
	Staging Manager
	Safety / Security Officer
	Administrative Assistant
	Receiving Manager
	Shipping Manager
	Runners (2 minimum)
	Yard Man (1 minimum)
	Decon Manager
	Consultants – The Response Group/ Crowley Co.
	Equipment:
	Office Trailer w/power (generator or hard-wire)
	Light towers
	First Aid kits
	Radios (walkie-talkies)
	Cell phones
	Telephones / Fax machine
	Copy machine
	Maps
	Computers
	Road Cones / Caution Tape / Road Signs
	Flashlights
	PPE – Raingear / Boots / Gloves / Hardhats
	Tool Kit – hammer, nails, adj. wrench, pliers, screw driver, duct tape, etc.
	Supplies:
	Food
	Water
	Port-a-pots
	General office supplies
	Other – list as necessary
	Goals
	Site Specific Safety & Health Plan
	Daily Work Permit and Safety Checklist
	ICS Forms
	Establish update schedule with RESL
	Establish resource inventory tracking system
	Establish communications plan – copy IC
	Establish decontamination procedure – copy IC
	Staging Manager Response Kit:
	Ring Binder w/ICS forms, etc. (disk and hard copy)
	Printer (portable) with paper/extra cartridges
	12 v > 120 volt power supply inverter, APC AC/DC 75 W
	Power outlet strip
	Cell phone > laptop communications modem

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	Cell phone batteries w/charger base
	Walkie-talkies
	Diskettes
	Batteries
	Clip board
	Surveyors tape
	Camera
	Gloves
	Note pads
	Post-It Notes
	Name badges
	Incident Log Book (CPC)
	Flashlight
	Pens/Pencils/Sharpie Markers
	Stapler/Paper-Binder Clips
	Street Atlas Program
	Envelopes / File Folders
	Contractor Safety Orientation pamphlets (6)
	Emergency Response Plan
	CPC Directional Signs
	Establish check-in function as appropriate utilizing the ICS 211P & E and provide updates to the resource unit leader as requested.
	Request maintenance service for equipment at Staging Area as appropriate.
	Respond to request for resource assignments. (Note: This may be direct from the OSC or Staging Area Director).
	Demobilize Staging Area in accordance with the Incident Demobilization Plan.
	Service and prepare equipment for the next operational period.
	Maintain Staging Area in orderly condition.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
PLANNING SECTION

PLANNING SECTION CHIEF – PSC DEPUTY PLANNING SECTION CHIEF – DEPUTY PSC	
Responsibilities	
The PSC, a member of the General Staff, is responsible for the collection, evaluation, dissemination, and use of incident information and maintaining status of assigned resources. Information is needed to: 1) understand the current situation, 2) predict the probable course of incident events, 3) prepare alternative strategies for the incident, and 4) submit required incident status reports. The PSC may have Deputy PSC's, who may be from the same organization or from an assisting agency. The Deputy PSC should have the same qualifications for which they work and must be ready to take over position at any time.	
Checklist	
Reactive Phase	
	Obtain briefing from Incident Commander and confirm Agency Notifications have been made.
	Notify and activate initial Planning Section personnel (SITL, FO, RESL and DOCL).
	Determine need for Air Patrol, NRDA Contractor, and ICS Contractor.
	Notify Strike Team PSC to build out Planning Section including specialty contractors as needed.
	Contact OSC to develop initial response strategy.
	Establish Reactive Phase communications plan for IMT.
	Contact GIS staff to initiate development of a Google Earth fly-over of source area and the affected watershed.
Proactive Phase	
	Review Common Responsibilities.
	Obtain briefing from the Incident Commander or District Spill Management Team PSC.
	Collect, process, and display situation information about the incident.
	Provide input to Incident Command & Operations Section Chief.
	Work with IC and Section Chiefs to prepare draft ICS 202 Incident Objectives.
	Assist OSC in the development of response strategies.
	Supervise preparation of the Incident Action Plan.
	Facilitate planning meetings and briefings.
	Assign personnel already on-site and request additional personnel to staff.
	Planning Section positions appropriately and per the response plan.
	Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation).
	Determine the need for any specialized resources in support of the incident.
	Establish special information collection activities as necessary (e.g., weather, environmental, toxics, etc.).
	Assemble information on alternative strategies.
	Provide periodic predictions on incident potential.
	Keep IMT apprised of any significant changes in incident status.
	Supervise the tracking of incident personnel and resources through the RESL.
	Develop ICS 230 Meeting Schedule in conjunction with the IC/UC and SITL.
	Oversee preparation and implementation of the Incident Demobilization Plan.

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	Incorporate plans (e.g., Traffic, Medical, Communications, and Site Safety) into the IAP.
	Develop other incident supporting plans (e.g., salvage, transition, security).
	Assist Operations with development of the ICS 234 Work Analysis Matrix and ICS 215 Operational Planning Worksheet.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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RESOURCE UNIT LEADER - RESL	
Responsibilities	
The RESL is responsible for maintaining the status of all assigned tactical resources and personnel at an incident. This is achieved by overseeing the check-in of all tactical resources and personnel, maintaining a status-keeping system indicating current location, and status of all these resources.	
Checklist	
	Review Common and Unit Leader Responsibilities.
	Obtain briefing and special instructions from Planning Section Chief.
	Establish the check-in (ICS 211P) function at command post.
	Work with Staging Area Manager(s) in the field to ensure they are utilizing the check-in (ICS 211P & E) process to track equipment and personnel arriving and departing the staging area. Obtain regular updates for available resources.
	Prepare, post, and maintain Organization Assignment List (ICS 203) and Organization Chart (ICS 207) working with each section chief and unit leader.
	Ensure appropriate resource tracking process is established and communicated.
	Maintain master roster of all tactical resources checked in at the incident.
	Ensure ICS 210 Change Status forms are utilized when resources are reassigned to another location.
	Review and filter all ICS 213RR Resource Requests from OPS with available resources in staging before ICS 213RR is submitted to Logistics for ordered.
	Coordinate with Logistics to establish tracking of ordered/en-route resources.
	Maintain and post the current status, location, and assignments of all tactical resources on ICS-201-4 "Resource Summary".
	Work with Operations and Environmental Unit to prepare strategies and tactics (ICS 234 Work Analysis Matrix) to support objectives (ICS 202).
	Draft ICS 215 Operational Planning Worksheet with Operations, Environmental, and Safety to determine required resources needed to implement tactics in the field and what additional resources need to be ordered.
	Prepare appropriate parts of Division Assignment Lists (ICS 204).
	Establish communication with Operations (Field) and Staging Area Managers to maintain, track, and update resource summary and status changes.
	Oversee and deploy check-in recorders to the field and staging sites to assist with resource/personnel verification, update/maintain of the resource summary.
	Attend appropriate meetings and briefings as required.
	Provide resources and organization information to SITL for situation display.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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ENVIRONMENTAL UNIT LEADER - ENVL

Responsibilities

The Environmental Unit Leader is responsible for environmental matters associated with the response, including strategic assessment, modeling, surveillance, and environmental monitoring and permitting. The ENVL may be staffed or co-staffed by an agency representative as required by state policy or the UC. Technical support staff frequently assigned to the Environmental Unit may include the Scientific Support Coordinator and Specialists in the following areas: Sampling, Weather Forecast, NRDA, Remediation Technologies, Wildlife, Shoreline Cleanup/Assessment, Disposal, Trajectory Analysis, Resources at Risk, Historical/Cultural Resources, and Response Technologies.

Checklist

	Review Common and Unit Leader Responsibilities
	Obtain a briefing and special instructions from the PSC.
	Identify sensitive areas, recommend response strategies and prioritize for protection.
	Consult with Liaison to our ROW patrol contractor to obtain availability of planes to provide aerial recon support.
	Following consultation with natural resource trustees, provide input on wildlife protection strategies (e.g., removing oiled carcasses, pre-emptive capture, hazing, and/or capture and treatment).
	Determine the extent, fate, and effects of contamination.
	Acquire, distribute, and provide analysis of weather forecasts.
	Coordinate with the Air Operations Branch Director for the establishment of flight restrictions, if necessary, for sensitive wildlife areas.
	Participate in Prep for Tactics and in development of ICS 204 Work Assignments to identify potential environmental concerns and associated mitigation measures and participate in other planning cycle meetings.
	Work with OSC to determine response actions with the greatest net environmental benefit and monitor the environmental consequences of response actions.
	Develop shoreline cleanup and assessment plans. Identify the need for, and prepare any special advisories or orders.
	Identify the need for, and obtain, permits, consultations, and other authorizations, including Endangered Species Act (ESA) provisions.
	Following consultation with the FOSC's.
	Historical/Cultural Resources Technical Specialist identifies and develops plans for protection of affected historical/cultural resources.
	Evaluate the opportunities to use various response technologies.
	Develop disposal plans.
	Develop a plan for collecting, transporting, and analyzing samples.
	Maintain Individual/Unit Log (ICS 214a/214).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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SITUATION UNIT LEADER - SITL	
Responsibilities	
The Situation Unit Leader is responsible for collecting, processing, and organizing incident information relating to the growth, mitigation, or intelligence activities taking place on the incident. The SITL may prepare future projections of incident growth, maps, and intelligence information.	
Checklist	
	Review Common and Unit Leader Responsibilities.
	Check in to Command Post to obtain briefing and special instructions from the Planning Section Chief.
	In coordination with Operations Section, organize and direct Recon Teams, including twice daily Air Recon.
	Post Recon results in Situation Status display.
	Provide updated Recon information to appropriate personnel (Operations Section Chief, Division Supervisors, etc.).
	Follow Resource Tracking Process described in Section 4.06. Provide hourly updates (to be determined by the SITL) on equipment and personnel status to Resource Unit Leader.
	Develop and implement accountability, safety, and security measures for Situation Unit personnel and resources.
	Ensure GIS/Trajectory Specialist predicts spill trajectory and marks ETA to established mileposts on the Situation display map.
	Refer to Tactical Response Plan for pre-determined shoreline and division segments.
	Request initial trajectory.
	Obtain updated trajectories based on surveillance and weather updates.
	Develop spilled product Mass Balance Summary.
	Obtain weathering profile for type of oil spilled from GIS/Trajectory Specialist or Environmental Unit Leader.
	Request weather/tide data from NOA SSC.
	Collect, maintain and display spill movement data for duration of incident.
	Weather, slick surveillance, trajectory.
	Develop maps depicting spill area, spill trajectories.
	Provide updated spill surveillance data to trajectory specialist as necessary.
	Collect, maintain and display spill response data including:
	Spill Report.
	Frequently used phone numbers.
	Maps depicting response operations, staging areas, and other information as necessary.
	Coordinate with appropriate Response Team personnel to gather information for incident Status Reports and Equipment Status Board.
	Status of manpower and equipment resources currently assigned, available and/or out of service.
	Maps showing environmentally sensitive areas, protection strategies.
	Status of oily waste management operations, including quantity of oil spilled and quantity of oil, oily water, and debris recovered.
	Prepare the Incident Status Summary (ICS 209).

	Ensure CMT Assumed Consequences and ICS 201, 202 forms are completed, approved by the Incident Commander, and forwarded to the Atlanta Crisis Management Team as early as possible in the event and at least every 4 hours.
	Provide status reports to appropriate requesters.
	Maintain Individual/Activity Log (ICS Form 214a).
	Participate in incident planning meetings, as required.
	Advise Planning Section Chief and Incident Commander or any significant changes in incident status.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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GEOGRAPHIC INFORMATION SYSTEM SPECIALIST – GIS	
Responsibilities	
The GIS Specialist is responsible for gathering and compiling updated incident information and providing various map products to the incident. The Specialist will work with the Situation Unit and the Information Officer to ensure accurate and rapid dissemination of the incident to the cognizant parties.	
Checklist	
Reactive Phase	
	Initiate development of a Google Earth fly-over of source area and the affected watershed.
Proactive Phase	
	Review Common Responsibilities.
	Obtain briefing and special instructions from Planning Section and/or Situation Unit Leader.
	Determine GIS resource needs. Obtain required resources.
	Participate in incident planning meetings and provide briefings, as required.
	Gather and compile data from the different incident sections required to prepare maps or perform requested technical tasks.
	Conduct technical tasks or activities related to your area of expertise as requested.
	Provide maps for various components of the incident including booming site maps for ICS 204 "Division Assignment Lists". Develop route maps from staging areas to recovery points, route maps to medical facilities, and trajectory maps after approval from SITL.
	Develop required products within time limits.
	Provide status reports to appropriate requesters and Situation Unit.
	Arrange spill observations / overflights as needed, including night infrared photography. Coordinate with SITL and Air Operations Branch.
	Provide trajectory and overflight maps with current information.
	Assist contract GIS personnel as necessary, including assisting with utilization of CPC Response Site Sheets and Recovery Point Map Books.
	Assist with identifying resources at risk from USGS maps. Post them on the ICS 232 "Resources At Risk Summary" status board.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
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FIELD OBSERVER - FOBS	
Responsibilities	
The Field Observer (FOBS) is responsible for collecting or confirming situation information from personal observations at the incident location and provides this information to the SITL. If communications with the SITL are difficult, relay all information through the Situation Room at 678.762.2261, 2298, 2310, or 2383.	
Checklist	
	Review Common Responsibilities.
	Determine location of assignment, type of information required, priorities, time limits for completion, method of communication, and method of transportation.
	Obtain necessary equipment and supplies (e.g., safety equipment, radio, cell phone, incident specific phone list with all numbers for Incident Command Sections and Site Commanders, timepiece with second hand to measure stream velocity, field notebook, flagging to mark roads and turnoffs at boom deployment locations for response crews, CPC or county road maps, sample containers).
	Determine leading edge of the spill, perimeters of the incident, locations of oil concentration, rates of speed, weather conditions, environmentally sensitive areas, natural resources at risk, economically critical areas, hazards to personnel, and any other pertinent information.
	Assist in locating the following recovery points (in order of importance): 1. Last Stand, 2. Primary Recovery, 3. Leak Site Recovery.
	Determine the location of effective booming and recovery sites using the Recovery Point Maps or as directed by Incident Command or the Situation Room.
	If assigned to Air Recon, confirm schedule through staging and establish clear communication with Ground Recon personnel.
	Regularly report information to the Initial Incident Commander by established procedure.
	Be prepared to identify all facility locations (e.g., Helispots, Division, and Branch boundaries).
	Report information to the SITL by established procedure.
	Report immediately any condition observed that may cause danger and a safety hazard to personnel.
	Gather intelligence that will lead to accurate predictions.
	Maintain Individual/Activity Log (ICS Form 214a), including shoreline oil conditions.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
PLANNING SECTION

DOCUMENTATION UNIT LEADER - DOCL

Responsibilities

The Documentation Unit Leader (DOCL) is responsible for establishing a filing system for the maintenance of accurate, up-to-date incident information that will constitute the incident's legal record. Examples of incident documentation include: Incident Action Plan, incident reports, communication logs, injury claims, situation status reports, etc. Thorough documentation is critical to post-incident analysis. Some of the documents may originate in other sections. This unit shall ensure each section is maintaining and providing appropriate documents for inclusion in the incident file. The DOCL will, after the response is terminated, provide to the IC the complete set of incident files to store for legal, analytical, and historical purposes. The DOCL will prepare meeting minutes, track open action items, and maintain the incident event log.

Checklist

The Administrative Assistant for the District (Documentation Unit Leader) in which the incident occurs will be responsible for overseeing administrative support within the Command Center to the Incident Commander and each of the following sections of the Response Organization (Operations, Planning, Logistics, Staging, and Finance).

	Review Common and Unit Leader Responsibilities.
	Coordinate with the Planning Section Chief to obtain briefing.
	Set up work area; begin organization of incident files. Set up work area; establish filing area; begin organization of incident files.
	Establish duplication service; respond to requests.
	Develop and communicate documentation protocols to the IMT.
	File all official forms and reports.
	Review records for accuracy and completeness; inform appropriate units of errors or omissions.
	Provide incident documentation as requested.
	Organize files for submitting final incident documentation package.
	Prepare ICS 231 Meeting Summary and ICS 233 Open Action Tracker and Incident Event Log.
	Ensure adequate supply of commonly used office supplies and equipment. Direct errand runners for replenishing supplies.
	Attend all Command Center meetings, record notes and all decisions (date, time and decision-making personnel/organizations) as well as maintain a detailed log of daily activities as required.
	Oversee Copy Center, Data Entry Center, Fax Center, and Supply 'Store', ensuring adequate volunteer personnel for the needs of each section.
	Assist third party resource tracking contractor (i.e. The Response Group) with data input and other requirements.
	Assist the Incident Commander and the Situation Unit Leader in the Planning Section as needed (i.e. coordination of the IAP).
	Transport vital records to Command Center, including copy of current ERP.
	Maintain Individual/Unit Log (ICS 214a/214).
	IF LOCATED AT STAGING:
	Work with the Staging Area Manager and Finance representative to assure that adequate files are kept for original contractor daily work reports and applicable back up.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
PLANNING SECTION

	DOCUMENT RETENTION:
	Upon completion of the emergency response phase of an incident, the Documentation Unit collects all documentation generated during, or related to, the spill response. If for any reason it is not possible or practical to do so, individuals should identify to the DOCL the specific document(s) not being turned over and ensure that he/she maintains or preserves the document(s) as required. Documents will include but are not limited to: Signed IAPs Unit Logs Individual Logs Notes/Log books Photographs Agency Notifications Daily work Permits Spill response communications (misc.) Event Reports Invoices Consultant/Contract reports
	All documentation should be packaged and transmitted to the Corporate Environmental department.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
PLANNING SECTION

DEMOBILIZATION UNIT LEADER - DMOB	
Responsibilities	
The Demobilization Unit Leader (DMOB) is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity. The demobilization planning should be initiated early in a response to avoid delays in demobilizing resources that are no longer needed.	
Checklist	
	Review Common and Unit Leader Responsibilities.
	Review incident resource records to determine the likely size and extent of demobilization effort and develop a resource matrix.
	Coordinate demobilization with Agency Representatives.
	Monitor the on-going Operations Section resource needs.
	Identify surplus resources and probable release time.
	Utilize the demobilization checkout procedures for release of incident resources (ICS 221).
	Establish communications with off-incident facilities, as necessary.
	Develop an Incident Demobilization Plan that would include: 1. General information section. 2. Responsibilities section. 3. Release priorities. 4. Release procedures. 5. Demobilization Checkout form ICS 221. 6. Directory.
	Prepare appropriate directories (e.g., maps, instructions, etc.) for inclusion in the demobilization plan.
	Demobilization Plan should include process by which suppliers inspect condition of released resources and sign off if acceptable prior to moving offsite.
	Distribute demobilization plan (on and offsite).
	Provide status reports to appropriate requestors.
	Ensure that all Sections/Units understand their specific demobilization responsibilities.
	Supervise execution of the Incident Demobilization Plan.
	Brief the PSC on demobilization progress.
	Maintain Individual/Unit Log (ICS 214a/214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

LOGISTICS SECTION CHIEF – LSC
DEPUTY LOGISTICS SECTION CHIEF – DEPUTY LSC

Responsibilities

The LSC, a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The LSC participates in the development and implementation of the IAP and activates and supervises the Branches and Units within the Logistics Section. The LSC may have Deputy LSC's, who may be from the same organization or from an assisting agency. The Deputy LSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Checklist

	Review Common Responsibilities.
	Obtain briefing from Incident Commander.
	Plan the organization of the Logistics Section.
	Obtain information on available aircraft charters prior to initial Strike Team conference call.
	Assign work locations and preliminary work tasks to Section personnel.
	In conjunction with Command, develop and advise all Sections of the IMT resource approval and requesting process.
	Determine the size, organization, and staffing needs of the Logistics Section as required to support the incident.
	Assemble and brief Logistics Branch Directors and Unit Leaders on their duties and your expectations.
	Notify the Resources Unit of the Logistics Section Units activated, including names and locations of assigned personnel.
	Locate and order personnel and resources as requisitioned by Operations via the Resource Unit Leader.
	Establish Incident Command Center – coordinate with Incident Commander and Communications Leader. Secure 1,500 sq. ft. room, private IC section leader conference room. Establish necessary communications and equipment. Set up office service area that includes fax, copier, workstations, etc. Secure necessary staff to support operation including IAP software assistants.
	Establish initial Base and future Staging Area – coordinate with Operations and Resource Unit Leader. Set up field office (mobile office) that includes fax, copier, and workstations. Establish communications. Secure necessary staff to support operation including IAP software assistants and field runners.
	Identify service and support requirements for additional resources by OPS.
	Develop comprehensive communication plan – coordinate with Communication Unit Leader.
	Participate in ICS 234 development and/or review proposed tactics for next operational period for ability to provide resources and logistical support.
	Coordinate and process requests for additional resources by OPS.
	Communicate with Resource Unit and Staging Manger regarding ordered/en-route resources.
	Review IAP and estimate Section needs for the next operational period.
	Advise on current service and support capabilities.
	Advise Command and Chiefs on resource availability to support incident needs.
	Identify resource needs for incident contingencies.
	Track resource effectiveness and make necessary adjustments.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

	Provide input to and review the Communications Plan, Medical Plan, and Traffic Plan.
	Obtain personnel and equipment rate sheets from vendors and review with Finance.
	Maintain regular contact with supply vendors to maintain accuracy of equipment inventory (at Staging) and availability (at vendor's warehouse). Discuss lead time necessary for delivery of equipment from the warehouse to Staging.
	Prepare service and support elements of the IAP and estimate future requirements.
	Request and/or set up expanded ordering processes as appropriate to support incident.
	Receive Incident Demobilization Plan from Planning Section.
	Recommend release of Unit resources in conformity with Incident Demobilization Plan.
	Implement applicable portions of the incident Demobilization Plan.
	Ensure the general welfare and safety of Logistics Section personnel.
	Maintain Individual/Activity Log (ICS Form 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

SERVICES BRANCH DIRECTOR - SVBD	
Responsibilities	
The SVBD, when activated, is under the supervision of the LSC and is responsible for the management of all service activities at the incident. The SVBD supervises the operations of the Communications, Medical, and Food Units.	
Checklist	
	Review common responsibilities.
	Obtain working materials.
	Determine the level of service required to support operations and the staff of the Branch accordingly.
	Prepare or provide input to and review the Communications Plan (ICS 205) and Medical Plan (ICS 206).
	Participate in planning meetings of Logistics Section personnel.
	Organize and prepare assignments for the Service Branch personnel.
	Coordinate activities of the Branch Units.
	Inform the LSC of Branch activities.
	Resolve Service Branch problems.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

COMMUNICATIONS UNIT LEADER - COML	
Responsibilities	
The COML is responsible for developing plans for the effective use of incident communications equipment and facilities, installing and testing of communications equipment, supervision of the Incident Communications Center, distribution of communications equipment to incident personnel, and the maintenance and repair of communications equipment.	
Checklist	
	Review Common and Unit Leader Responsibilities.
	Obtain briefing from Logistics Section Chief.
	Ensure that adequate means of communication exists between the Command Post, field personnel, and the Atlanta Control Center.
	Incorporate Satellite phones as necessary.
	Activate Incident and Response e-mail account.
	Maintain list of vendors that can provide communications equipment for emergency use.
	Recover equipment for use in future incidents.
	Secure additional communications equipment including cellular phones, telephones and telephone lines, radio base stations, and two way radios to provide a complete communications network by ensuring the following:
	Incident Command Center:
	Install a minimum of 8 hardwired phone lines.
	Install a minimum of 1 dedicated fax line.
	Install a minimum of 1 dedicated line for a personal computer.
	Utilize a satellite phone if other means of communications are not functional.
	Test different modes of communication to determine which ones are to be used.
	Establish a schedule for periodic progress reports from section leaders and recovery sites.
	Meetings of section leaders should be held twice daily prior to shift changes to review the status of the clean-up and the upcoming 12 hour plan.
	Prepare and maintain personnel lists with pertinent information (phone #, shift, hotel/room #, pager #, cellular phone #, etc.).
	Prepare maps with directions to the incident command center, staging, each containment/recovery site, product off-loading sites, and hotels.
	Have runners available should all other means of communications fail or become disabled.
	Staging/Logistics:
	Install or have access to at least two hardwired phones.
	Install a minimum of one dedicated fax line.
	Install a minimum of one dedicated line for a personal computer.
	Utilize portable radio and/or cellular phone if there is adequate reception.
	Check to see if pager is functional.
	Utilize a satellite phone if other means of communications are not functional.
	Determine which modes of communication connecting staging with the incident command center, logistics, and each containment/recovery site are functional.
	Have runners available to set up a remote communications point if no means of communication are functional at the staging location.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

	Oil Containment/Recovery Sites:
	Utilize portable radio and/or cellular phone if there is adequate reception.
	Check to see if pager is functional.
	Utilize a satellite phone if other means of communications are not functional.
	Have runners available if normal communications are inadequate at the work site. Personnel may need to be positioned at locations where there is good reception (e.g.: at a higher elevation). Runners can be used to convey information between the work site and the relay points.
	Ground Recon:
	Utilize portable radio and/or cellular phone if there is adequate reception.
	Check to see if pager is functional.
	Utilize a satellite phone if other means of communications are not functional.
	Aerial Recon:
	Colonial is licensed to use the aviation frequency 122.925 MHz for communications between ground personnel and patrol planes (or any other airborne craft). This is a standard aviation frequency that will be in both Colonial patrol planes and in any helicopters or airplanes that are used. Portable radios on this frequency are carried by Colonial ROW personnel and will be distributed to each emergency response site for communications with any aerial recon aircraft or helicopters.
	In the event that air-to-ground radio communications are not functional and something is observed that warrants urgent notification land the helicopter at a location where communications can be established via cellular, radio, or satellite phone.
	Public Affairs/ROW Claims:
	Establish an office separate from Incident Command Center.
	Install or have access to at least 2 hardwired phones.
	Install a minimum of 1 dedicated fax line.
	Install a minimum of 1 dedicated line for a personal computer.
	Advertise 1-800 claims notification phone number for those affected by the incident per regulatory requirements.
	P.R. and claims to each have at least one representative available around the clock.
	Use frequency 122.925 MHz to communicate between ground personnel and aircraft.
	Provide technical assistance to ensure all phases of the communications network functions properly.
	Prepare and implement the incident Radio Communications Plans (ICS 205).
	Ensure an equipment accountability system is established.
	Recover equipment form Units being demobilized.
	Maintain Individual/Activity Log (ICS Form 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

FOOD UNIT LEADER - FDUL	
Responsibilities	
The FDUL is responsible for supplying the food needs for the entire incident, including all remove locations, e.g., Staging Areas, as well as providing food for personnel unable to leave tactical field assignments.	
Checklist	
	Review Unit Leader Responsibilities.
	Determine food and water requirements.
	Determine the method of feeding to best fit each facility or situation.
	Obtain necessary equipment and supplies.
	Ensure that well-balanced menus are provided.
	Order sufficient food and potable water from the Supply Unit.
	Maintain an inventory of food and water.
	Maintain food service areas, ensuring that all appropriate health and safety measures are being followed.
	Supervise Food Unit personnel as appropriate.
	Maintain Individual/Unit Log (ICS 214a/214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

MEDICAL UNIT LEADER - MEDL

Responsibilities

The Medical Unit Leader (MEDL) is primarily responsible for 1) development of the Medical Plan, 2) providing medical care and overseeing health aspects of response personnel, 3) obtaining medical aid and transportation for injured and ill incident personnel, 4) coordinating with other functions to resolve health and safety issues, and 5) preparation of reports and records.

Checklist

	Review Common Responsibilities.
	Review Unit Leader Responsibilities.
	Participate in Logistics Section/Service Branch planning activities.
	Establish the Medical Unit.
	Prepare the Medical Plan (ICS 206).
	Provide any relevant medical input into the planning process for strategy development.
	Coordinate with Safety Officer, Operations, hazmat specialists, and others on proper personnel protection procedures for incident personnel.
	Prepare procedures for major medical emergency.
	Develop transportation routes and methods for injured incident personnel.
	Ensure incident personnel patients are tracked as they move from origin, care Facility, and disposition.
	Provide continuity of medical care for incident personnel.
	Declare major medical emergency as appropriate.
	Provide or oversee medical and rehab care delivered to incident personnel.
	Monitor health aspects of incident personnel including excessive incident stress.
	Respond to requests for medical aid, medical transportation, and medical supplies.
	In conjunction with Finance/Admin Section, prepare and submit necessary authorizations, reports, and administrative documentation related to injuries, compensation, or death of incident personnel.
	Coordinate personnel and mortuary affairs for incident personnel fatalities.
	Provide oversight and liaison as necessary for incident victims among emergency medical care, medical examiner, and hospital care.
	Provide for security and proper disposition of incident medical records.
	Maintain Unit Log (ICS 214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

SUPPORT BRANCH DIRECTOR - SUBD	
Responsibilities	
The SUBD, when activated, is under the direction of the LSC, and is responsible for the development and implementation of logistics plans in support of the Incident Action Plan. The SUBD supervises the operations of the Supply, Facilities, Ground Support, and Vessel Support Units.	
Checklist	
	Review Common Responsibilities.
	Obtain work materials.
	Determine initial support required for operations in coordination with the Logistics Section Chief and Service Branch Director.
	Determine the Support Branch organization and staffing level required to support operations.
	Prepare initial organization and assignments for support operations.
	Assemble and brief Support Branch personnel on the incident details and your expectations.
	Prepare Security, Transportation, Traffic and Vessel Routing plans as required by the incident.
	Determine if assigned Branch resources are sufficient.
	Maintain surveillance of assigned Units work progress and inform the LSC of their activities.
	Resolve problems associated with requests from the Operations Section.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST
LOGISTICS SECTION

SUPPLY UNIT LEADER – SPUL	
Responsibilities	
The Supply Unit Leader (SPUL) is primarily responsible for procuring all resources (personnel, equipment, and supplies) for the incident. If not conducted by the Staging Area Manager(s), the SPUL is also responsible for receiving, storing, and distributing all supplies; maintaining an inventory of supplies; and storing and disbursing of non-expendable supplies and equipment.	
Checklist	
	Review Common Responsibilities.
	Review Unit Leader Responsibilities.
	Participate in Logistics Section/Support Branch planning activities.
	Determine the type and amount of resources en-route to the incident.
	Review the IAP for information on operations of the Supply Unit.
	Develop and implement safety and security requirements for equipment/supplies storage areas/facilities.
	Order, receive, distribute, and store supplies and equipment.
	Receive and respond to requests for personnel, supplies, and equipment.
	Maintain an inventory of supplies and equipment.
	Prepare ICS 210 Change Status forms if equipment or other significant resources are deployed from storage areas.
	Service reusable equipment.
	Submit reports to the SUBD.
	Maintain Individual/Unit Log (ICS 214a/214).

Colonial Pipeline Company

POST EMERGENCY RESPONSE REVIEWS

Each time an Emergency Operating Procedure is activated for an actual event, a post response review shall be conducted to determine if the emergency operating procedures and emergency response activities were effective. Depending on the nature and complexity of the event, this evaluation may be separate from the Incident Analysis Process of Corporate Procedure 16 that is more focused on determining the cause(s) of the incident.

The relevant Operations Manager is responsible for assembling the review team and ensuring the review is conducted, corrective actions (if any) are identified and assigned, and the findings are properly documented. The assessment will include the adequacy of the following:

The emergency operating procedures activated.

Required notifications were made.

Availability of response equipment, materials, and personnel.

Competency of the responders to minimize the safety and environmental hazards.

Corrective actions are to be identified, assigned, and documented in OPIS/Maximo for deficiencies discovered during the review. The findings from the review are to be:

Entered into the Work Log section of the Event Report in Maximo (smaller events).

Posted into the Drill and Spill Repository in the Emergency Response SharePoint site (more significant events).

For significant spills the template in Section 4.04.1 may be used to document the learnings.

Colonial Pipeline Company

POST EMERGENCY RESPONSE REVIEW – SIGNIFICANT SPILL

Date of spill:
Location:
District Response Team, Strike Team, or both activated:
Attach listing of participants
Brief description of scenario:

Significant difficulties encountered during this response? (If yes, briefly describe)

Lessons learned:

Areas for improvement:

Corrective actions to be taken (also enter corrective actions into OPIS):

Core Response Components Evaluation (provide an explanation for answers that are not affirmative)

1) Notifications
Test the notifications procedures identified in the ERP.

Were required federal, state, and local agency notifications completed in a timely manner?
Were spill management team call-out procedures effectively executed?
Were notifications and responses properly documented?
Were shippers notified as appropriate?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute notification procedures?

2) Staff Mobilization
Demonstrate the ability to assemble the spill response organization identified in the ERP.

Was an initial Strike Team conference call effectively initiated within an hour?
Was there adequate coverage in key positions by Colonial and contractor to mount an acceptable initial response?
Did we utilize pre-determined command center and staging locations?
Was the command center adequately equipped?
Were adequate directions provided for those unfamiliar with the area to find the command center and staging area?
Did personnel initially report through Staging if not members of the IC?
Were there effective transitions when initial responders were relieved by pre-assigned personnel?
Any changes need to be made to current procedures being used or the ERP?

3) Ability to Operate Within the Response Management System Described in the ERP
Demonstrate the ability of the Spill Management Team work within the Incident Command System as defined in the response plan to effectively address the event.

Initial Response Management

Were appropriate emergency shutdown actions taken by the control center and/or local operations in a timely manner?
Did initial responders perform a thorough initial assessment and size-up of the incident (e.g., spill volume, product type, and hazards, including consideration of environmental conditions?

Was an acceptable Site Safety & Health Plan quickly developed and implemented in the field?
Were Initial Strategic Objectives quickly identified and implemented?
Was an effective Unified Command established?
Were initial responders familiar with their responsibilities?
Comments/Lessons Learned/Recommendations.

Incident Command Staff

Was staff familiar with the ICS Planning Cycle and able to effectively apply it?
Did the staff develop and prioritize overall incident objectives and assess if current and planned actions were consistent with those objectives?
Did the staff establish operational periods, meeting schedules, and approve an IAP?
Did the incident commander establish a link with CMT/Situation Room in Alpharetta office; complete the Spill Situation Status Summary and Crisis Management Assumed Consequences forms; and set up a communication cycle to keep appropriate information flow between IC and CMT?
Did the incident commander effectively delegate duties?
Was there good information flow within the and between sections?
Was there adequate administrative support?
Were there enough adequately trained (HAZWOPER and functionally proficient) internal and contractor personnel to fill the required positions for two shifts for a sustained response?
Was a shift change schedule established and was there an effective plan for making the transitions?
Were effective briefing meetings held at appropriate intervals?
Comments/Lessons Learned/Recommendations.

Safety
Demonstrate the ability to monitor all field operations and ensure compliance with safety standards.

Were field operations adequately monitored to ensure compliance with safety standards, especially with respect to proximity of pipeline repair and recovery activities to water?
Was a Site Safety & Health Plan prepared and updated?
Were pre-work safety briefings held at all work sites?
Were safety zones established?
Were safety and health hazards adequately assessed to plan for effective protection?
Comments/Lessons Learned/Recommendations.

Operations
Demonstrate the ability to coordinate or direct operations related to the implementation of action plans.

Were tactical assignments appropriate to the overall incident objectives and strategies?
Was there effective coordination with Planning, Staging, and Logistics Sections to develop resource status tracking and documentation?
Was a communications schedule established at all recovery sites to report on progress and issues encountered that need attention?
Were sufficient personnel available to effectively manage all field operations?
Comments/Lessons Learned/Recommendations.

Planning
Demonstrate the ability to develop short-range tactical plans for the operations section and specific long-range strategic plans.

Was an incident action plan effectively developed using the IAP forms?
Was an appropriate meeting schedule established to prepare the action plan?
Was the Command Post Situation Display prepared and maintained?
Was a master list of all resources checked in at incident including check-in, status, current location, estimated time of deployment, etc. maintained?
Were the spill response activities (i.e., utilizing a historian, use of proper forms, etc.) adequately documented?
Comments/Lessons Learned/Recommendations.

Logistics
Demonstrate the ability to provide the necessary support of both short-term and long-term action plans.

Was there effective integration of Logistics, Staging, and the Resource Unit sections?
If Logistics did not immediately mobilize to the command center was there a smooth transition planned for when the move was made to join the command center?
Comments/Lessons Learned/Recommendations.

Finance
Demonstrate the ability to document the daily expenditures of the organization and provide cost estimates for continuing operations.

Was a claims phone number posted and processing system established?
Were daily committed cost estimates documented and provided to IC?
Was it confirmed that all contractors responding had valid contracts with CPC?
Were contracts promptly established/adjusted for contractors without valid contracts?
Was it quickly determined if a 3rd party cost monitoring contractor was needed?
Comments/Lessons Learned/Recommendations.

Public Information/Liaison
Demonstrate the ability to form a joint information center and provide the necessary interface between unified command and the media.

Was an initial press release issued within an appropriate time frame?
Was a protocol established for authorizing release of information to media?
Was a schedule prepared for regular progress reports on the spill cleanup efforts to be distributed to local officials, citizens, and the media?
Were email updates on response progress prepared for employees?
Comments/Lessons Learned/Recommendations.

4) Source Control
Demonstrate the ability of the spill response organization to control and stop the discharge at the source.

Was the spill location confirmed in a timely manner?
Were control measures effectively executed to stop/minimize the discharge at the source (effective station shut-down and valve closures)?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute source control procedures?

5) Assessment
Demonstrate the ability of the response organization to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of tactical operations.

Were weather and trajectory information obtained/determined?
Were estimates of initial spill volume and potential drain down determined?
Were recon teams (ground and air) dispatched in a timely fashion and did they provide needed information to Planning to identify effective recovery locations?
Were NRDA implications considered and acted upon to collect time sensitive information?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute assessment procedures?

6) Containment
Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations.

Were timely/effective actions taken to minimize product from entering creek?
Was the "Last Stand" recovery point identified and boom deployed in advance of the product leading edge?
Was there sufficient equipment available for all containment sites?
Did contractors demonstrate adequate expertise in booming strategy and timely deployment?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute containment procedures?

7) Recovery
Demonstrate the ability of the response organization to recover, mitigate, and remove the discharged product.

Were skimmers adequately deployed and operational?
Was there adequate on-site storage capacity available (vac trucks, tank trucks, frac tanks) to accommodate recovered volumes?
Were arrangements made to provide adequate offloading capabilities and off-site storage capacity to hold recovered product?
Were there appropriate means to track volume of recovered product and distinguish between volume discharged from the environment and volume collected from the pipe?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute recovery procedures?

8) Protection
Demonstrate the ability of the response organization to protect the environmentally and economically sensitive areas identified in the ACP and ERP.

Were sensitive areas identified and prioritized?
Did action plan adequately address protective booming strategies?
Were potentially affected water intakes quickly identified and were measures taken to provide appropriate protection?
Were wildlife protection areas at risk identified and were effective protective measures included in the action plan?

Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute protection procedures?

9) Disposal
Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.

Was an adequate waste minimization plan (i.e. segregation of contaminated soil/debris) prepared?
Was an adequate waste disposal plan prepared?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute waste management procedures?

10) Communications
Demonstrate the ability to establish an effective communications system for the spill response organization.

Were there adequate communications capabilities available between the incident command center, recon, staging, logistics (if off-site), containment/recovery sites, and Alpharetta situation room?
Did the command center have adequate internet access?
Did command center and staging make arrangements to acquire hard-wired phones?
Were satellite phones brought to the site and were they ready for use?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute communication procedures?

11) Transportation
Demonstrate the ability to provide effective transportation to facilitate response activities.

Was thought given to traffic flow and how to integrate support from local authorities?
Was the acquisition of required road permits for heavy equipment and supplies adequately addressed?
Comments/Lessons Learned/Recommendation.

12) Personnel Support
Demonstrate the ability to provide the necessary support of all personnel with the response.

Was there adequate overnight accommodations provided for on a continuing basis for a sustained response?
Were suitable feeding arrangements made for response personnel?
Were emergency services for response personnel made available?
Were adequate portable toilets facilities mobilized?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute support procedures?

13) Equipment Maintenance & Support
Demonstrate the ability to maintain and support all equipment associated with the response.

Were there adequate capabilities provided to maintain response equipment?

Are personnel adequately trained to successfully execute maintenance procedures?
Comments/Lessons Learned/Recommendations.

14) Procurement
Demonstrate the ability to establish an effective procurement system to obtain the necessary personnel, equipment, and supplies for a sustained response.

Were needed equipment and supplies secured in a timely manner?
Was a linkage established with corporate Procurement to provide assistance for difficult to obtain items?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute procurement procedures?

15) Documentation
Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

Did we record the salient information?
Were the appropriate ICS forms completed?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute documentation procedures?

Responses to be Used as Credit for Exercises

Credit may be taken for internal exercises conducted in response to actual spills. The qualifying requirements are explained in Section 7.01 of the ERP.

Exercise element to be credited (place “x” to identify element(s)):
District Spill Management Team tabletop exercise ___
Strike Team tabletop exercise ___
Equipment deployment ___

Components of plan exercised (place “x” to identify element(s)):
Notification ___
Staff mobilization ___
Ability to operate within the response management system ___
Source control ___
Assessment ___
Containment ___
Recovery ___
Protection ___
Disposal ___
Communications ___
Transportation ___
Personnel support
Equipment maintenance & support ___
Procurement ___
Documentation ___

Colonial Pipeline Company

POST EMERGENCY RESPONSE REVIEW – SIGNIFICANT SPILL

I certify that the spill response qualifies for credit for the exercises and plan components identified above.

_____ _____

Incident Commander Date

2/19/10

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

SPILL MANAGEMENT TEAM (Full Roster)				
Name	**District**	**Section / Unit**	**Strike Team?**	**Role on SMT**
Command Staff				
Beck, Gerald	NED	Incident Command	X	IC
Pruitt, Darren	SED	Incident Command	X	IC
Glaze, Greg	GCD	Incident Command	X	IC
Barnes, Steve	NED	Incident Command	X	Deputy IC
Smith, Mike (OM)	GCD	IC / Command Staff - Safety	X	SOFR
Smith, Brian	SED	Command Staff - Safety	X	SOFR
Francetich, Robb	Corp	Command Staff - Safety		SOFR
Jones, Eric	NED	Documentation Unit		SOFR
Livingston, Andrew	SED	Command Staff - Safety	X	SOFR
O' Brien, Ricky	GCD	Command Staff - Safety	X	SOFR
Paonessa, Sam	NED	Command Staff - Safety		SOFR
Phelps, Brian	GCD	Command Staff - Safety		
Rissler, Patricia	SED	Command Staff - Safety		
Sims, Carole	Corp	Command Staff - Legal	X	Legal
Coleman, Shannon	Corp	Command Staff - Legal		Legal
District Management (Deputy ICs)				
Allen, Trent (OM)	NED-VA	IC		Deputy IC
Cutting, Mike (OM)	SED-SC/NC	IC		Deputy IC
Wolfe, Adam (OM)	GCD-TX	IC		Deputy IC
Liaison Officer				

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Piazza, Marli	Corp	Command Staff - LOFR	X	Liaison Staff - PHMSA
Pearson, David	Corp	Command Staff - LOFR	X	LODR
Lohoff, Drew	Corp	Command Staff - LOFR	X	Liaison Staff
Bernard, Sarah	Corp	Command Staff - LOFR		DLNO
Cavendish, Brandon	Corp	Command Staff - LOFR		
Geis, Alan	Corp	Command Staff - LOFR		Liaison Staff - PHMSA (backup)
Hedgecock, James	SED	Command Staff - LOFR		Liaison Staff - State/local
Husband, Jessie	Corp	Command Staff - LOFR		Liaison Staff - Local/state floater
Jamison, Antar	Corp	Command Staff - LOFR		
McClain, George	Corp	Command Staff - LOFR		
McKay, Kevin	GCD	Command Staff - LOFR		Liaison Staff - State/local
Smith, Amara	NED	Command Staff - LOFR		Liaison Staff - State/local
Stanley, Josh	Corp	Command Staff - LOFR		Liaison Staff
Public Information Officer				
Berry, Bill	Corp	Command Staff - PIO	X	PIO
Pozin, Don	Corp	Command Staff - PIO	X	PIO Staff - Elected Officials
Gardner, Don (DM)	SED	IC / Command Staff - PIO	X	PIO Staff - Community Assistance
York, David	Corp	Command Staff - PIO	X	PIO Staff - Elected Officials
Rogers, Ryan	Corp	Command Staff - PIO	X	PIO Staff
Fernandez-Ravech, Kim	SED	Command Staff - PIO		PIO Staff
Chanthaphonh, Eddy	Corp	Command Staff - PIO		PIO Staff
Harrington-Burns, Dona	Corp	Command Staff - PIO		PIO Staff
Little, Chip	Corp	Command Staff - PIO		PIO Staff
Palmer, Sherri	Corp	Command Staff - PIO		PIO Staff
Sande, William	Corp	Command Staff - PIO		PIO Staff
Shelley, Stephen	Corp	Command Staff - PIO		PIO Staff
Schuman, Eric	Corp	Command Staff - PIO		PIO Staff
Smith, Aaron	Corp	Command Staff - PIO		PIO Staff
Tylinski, Jonathan	Corp	Command Staff - PIO		PIO Staff

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Operations				
Senger, Paul	NED	Operations	X	OSC
Conkle, Barry	GCD	Operations	X	OSC
Thomas, Stephen	SED	Operations	X	OSC
West, Robert (OM)	SED	IC / Operations	X	OSC
Cazares, Juan	SED	Operations	X	Recovery & Protection Branch
Sullivan, Stacy	GCD	Operations	X	Recovery & Protection Branch
Walsh, Stephen	SED	Operations	X	Recovery & Protection Branch
McPeak, Ray	NED	Operations	X	Recovery & Protection Branch
Lum, Dale	NED	Operations	X	Recovery & Protection Branch
Wilson, Mark	GCD	Operations	X	Recovery & Protection Branch
McClellan, Todd	NED	Operations	X	Pipeline Repair Branch
Barker, Michael	SED	Operations	X	Pipeline Repair Branch
Turner, Kelvin	SED	Operations	X	Pipeline Repair Branch
Garvey, Tyson	NED	Operations		Recovery & Protection Branch
Alford, Michael	GCD	Operations		Operations Staff
Landry, Dustin	GCD	Operations		Operations Staff
Amerson, Jay	SED	Operations		Operations Staff
Harrison, Gregory	SED	Operations		Operations Staff
Louvorn, John	SED	Operations		Operations Staff
Neumeyer, Michael	SED	Operations		Operations Staff
Schafer, Margaret	SED	Operations		Operations Staff
Herbstritt, Gregory	NED	Operations		Operations Staff
Jackson, Fred	NED	Operations		Operations Staff
Staging				
Peeler, David (OM)	GCD-MS	IC / Staging Area Director	X	Deputy IC / Staging Area Director
Kressley, Allen (OM)	NED-NJ (UN)	IC / Staging Area Director	X	Deputy IC / Staging Area Director
Griffen, Larry	SED	Alabama - Tennessee		
Purvis, Steve	SED	Alabama - Tennessee		

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Lawson, Mike	GCD	Baton Rouge		
Eicher, Craig	GCD	Baton Rouge		
Devillier, Roger	GCD	Beaumont		
Russo , Mark	NED	Fairfax		
Barnard, Tim	SED	Georgia		
Brooks, Keith	SED	Georgia		
Ledbetter, Stan	SED	Greensboro		
Rice, Steve	SED	Greensboro		
Poole, Tim	GCD	Lake Charles		
DaRocha, Janior	NED	Linden NJ		
Infante, Nick	NED	Linden NJ		
Freeze , Jim	NED	Maryland		
Hamilton, Tyler	GCD	Mississippi		
Overland, Terrell	GCD	Mississippi		
Small, John	NED	NED / Woodbury		
White, Michael	SED	South Carolina /Charlotte		
Williams, Steven (Heath)	SED	South Carolina /Charlotte		
Randolph, Clyde	NED	Virginia		
Young, Garvey	NED	Virginia		
Eichman, Jim	NED	Woodbury		
Planning				
Titus, Jeff	Corp	Planning	X	PSC
Fincher, Jeff	Corp	Planning		DPSC
Hughes, Robert	Corp	Planning		DPSC
Wickersham, Jon	Corp	Planning		DPSC
Bernhardt, Jon	Corp	Planning		Demob Unit
Environmental Unit				
Wyatt, John	SED	Environmental Unit	X	ENVL
Smith, Randy	GCD	Environmental Unit	X	ENVL

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Situation Unit				
Carpenter, Stan	NED	Situation Unit	X	S/TL
Vendon, Mike	Corp	Situation Unit	X	S/TL
Bates, Kevin	SED	Situation Unit		S/T Staff
Culbreath, John	SED	Situation Unit		S/T Staff
Fago, John	NED	Situation Unit		S/T Staff
Gilbreath, Lisa	GCD	Situation Unit		S/T Staff
Leigh, Faron	SED	Situation Unit		S/T Staff
Napier, Megan	NED	Situation Unit		S/T Staff
Peters, John	GCD	Situation Unit		S/T Staff
Shenk, Rob	NED	Situation Unit		S/T Staff
Williams, Mike	SED	Situation Unit		S/T Staff
James, Eric	Corp	GIS		Lead GIS
Eldridge, Roger	Corp	GIS		Staff GIS
Holderfield, Robert (Trupp)	Corp	GIS		Staff GIS
McChesney, Paul	Corp	GIS		Staff GIS
Resource Unit				
Sisk, Perry	SED	Resources Unit	X	RESL
Crowe, Lamar	Corp	Resources Unit	X	RESL
Troupe, Terry	Corp	Resources Unit	X	RES Staff
Plishka, Michael	GCD	Resources Unit	X	RES Staff
Daniel, Todd	Corp	Resources Unit		RES Staff
Allen, Greg	Corp	Resources Unit		Reactive Phase Office Support
Armitage, Thomas (Frank)	Corp	Resources Unit		Check-In / Check-Out Recorder
Dalton, Billy	Corp	Resources Unit		Check-In / Check-Out Recorder
Dorrington, Rasmus	Corp	Resources Unit		Check-In / Check-Out Recorder
Huff, Steve	NED	Resources Unit		Check-In / Check-Out Recorder
Jacobsen, Daniel	Corp	Resources Unit		Check-In / Check-Out Recorder
King, Stan	Corp	Resources Unit		Reactive Phase Office Support

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Lao, Anthony	Corp	Resources Unit		RES Staff
Martin, Phillip	SED	Resources Unit		Check-In / Check-Out Recorder
Morgan, Brett	Corp	Resources Unit		RES Staff
Reeves, Johnny	Corp	Resources Unit		Check-In / Check-Out Recorder
Saxton, Joseph	NED	Resources Unit		Check-In / Check-Out Recorder
Simms, Kendal	Corp	Resources Unit		RES Staff
Stegall, Chris	GCD	Resources Unit		Check-In / Check-Out Recorder
Stewart, Greg	NED	Resources Unit		Check-In / Check-Out Recorder
Vo, Chuong	Corp	Resources Unit		RES Staff
Williams, Erika	Corp	Resources Unit		RES Staff
Documentation Unit				**Primary Role / Secondary Role**
Smith, Belinda	GCD	Documentation Unit	X	DOCL / FIN
Arnold, Terri	SED	Documentation Unit	X	DOCL / LOG
Gallo, Frank (DM)	NED-MD	IC / Documentation Unit		Deputy IC /DOCL
Kazmarek, Cliff (ADM)	SED - GA	IC / Documentation Unit		Deputy IC /DOCL
Kirk, Denise (ADM)	GCD-LA	IC / Documentation Unit		Deputy IC /DOCL
Andrews, Nathan	SED	Documentation Unit		OPS
Barber, Kyle	NED	Documentation Unit		OPS / Planning
Barker, Elizabeth (Lisa)	SED	Documentation Unit		
Blocker, Dixie	SED	Documentation Unit		LOG / OPS
Borth, Angela	Corp	Documentation Unit		SOFR
Brown, Tom	SED	Documentation Unit		Scribe / LOG / DOCL
Burkhart, Caryn	SED	Documentation Unit		
Caporaletti, Dianne	NED	Documentation Unit		
Cornett, Eric	SED	Documentation Unit		
Davis, Alnesha	Corp	Documentation Unit		
Davis, Maranda	SED	Documentation Unit		Planning / OPS
Deason, Kathleen	Corp	Documentation Unit		
Durr, Tiffany	SED	Documentation Unit		

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Fortune, Angela	NED	Documentation Unit		FIN / DOCL
Harrell, Elizabeth	Corp	Documentation Unit		
Hodges, Mary Beth	Corp	Documentation Unit		DOCL / Planning
Holmgren, Brian	NED	Documentation Unit		LOG / OPS
Hudson, Jennifer	Corp	Documentation Unit		PIO
Hughes, Cathleen	Corp	Documentation Unit		PIO Staff (deploy to corporate)
Jones, Dawn	Corp	Documentation Unit		SOFR
Jones, Sonya	Corp	Documentation Unit		
Kindle, David	Corp	Documentation Unit		
Lackey, Dasha	Corp	Documentation Unit		
Langley, Denise	Corp	Documentation Unit		Historian / Planning / Command
Lott, Ann	GCD	Documentation Unit		LOG / DOCL
McKnight, Joseph	Corp	Documentation Unit		
Morgan, Patrece	Corp	Documentation Unit		LNO / FIN/ Command
Neblett, KayAnn	Corp	Documentation Unit		
Perrin, Robert	NED	Documentation Unit		OPS / Planning
Sivils, Jeff	Corp	Documentation Unit		Planning / OPS
Small, Christina	SED	Documentation Unit		
Solomon, Zach	Corp	Documentation Unit		PIO
Sparkman, Rhyan	GCD	Documentation Unit		Operations
Spears, Kim	Corp	Documentation Unit		
Sullivan, Wendy	Corp	Documentation Unit		LNO
Thomas, Becky	NED	Documentation Unit		ENV / Planning / OPS/ FIN / DOCL
Tinsley, Marie	GCD	Documentation Unit		FIN / DOCL
Tolbert, Becky	NED	Documentation Unit		SIT
Wiseman, Dale	Corp	Documentation Unit		
Logistics				
Brown, Buddy	Corporate	LOG	X	LSC
Dooley, Scott	Corp	LOG	X	LSC

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Curtis, Richard (OM)	GCD-TX (Hou)	IC / LOG	X	Deputy IC / District Staff Support
Peltier, Glenn	GCD (Beaumont)	LOG	X	District Staff Support
Bassett, James	SED (Atlanta)	LOG		Lead SED Staff Support
Booth, Dane	Corporate	Communications Unit	X	COML
Bunn, Chris	SED (Pelham)	LOG		District Staff Support
Carnes, Michelle	GCD (Beaumont)	LOG		District Staff Support
Droege, Ken	NED (Mitchell)	LOG		District Staff Support
Hendry, Richard	GCD (Collins)	LOG		District Staff Support
Hopwood, Todd	NED (Dorsey)	LOG		District Staff Support
Johnson, Chris	NED (Linden)	LOG		District Staff Support
Johnson, Michael	Corp	LOG		LOG Staff
Lowie, James	SED (Belton)	LOG		District Staff Support
Mardre, Mari	Corporate	Communications Unit		DCOML
Martin, Andy	Corporate	LOG		LSC
Prewett, Norm	GCD (Baton Rouge)	LOG		Lead GCD Staff Support
Smith, David	Corporate	Communications Unit		Comms Staff
Grasse, Dianne	Corporate	Security		Security
Sheffield, Noel	SED (Greensboro)	Service Branch		Service Branch
Finance				
Peacock, Lauren	NED	Finance	X	FSC
Bruce -Tagoe, Aubrey	GCD	Finance	X	FSC
Walker, Karen	SED	Finance	X	FSC
Gentzler, John (OM)	NED-NJ (WBJ)	IC / Finance	X	Deputy IC / FSC
Enrick, Allison	Corp	Finance		Cost Unit
Mills, Kim	Corp	Finance		Cost Unit
Parson, Christine	Corp	Finance		Cost Unit
Morrison, Skip	Corp	Community Assistance Unit	X	Community Assistance Unit Leader
Herman, Mike	Corp	Community Assistance Unit		Community Assistance Unit Leader

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Calloway, Michelle	Corp	Community Assistance Unit		Community Assistance Team Liaison
Brock, Shane	Corp	Community Assistance Unit		Compensation / Claims Specialist Lead
Gibbons, Troy (OM)	SED - AL/TN	Community Assistance Unit		IC / Compensation / Claims Specialist Lead
Mock, Terry	Corp	Community Assistance Unit		Compensation / Claims Specialist Lead
Fuqua, Keith	Corp	Community Assistance Unit		Compensation / Claims Specialist
Minnich, Ron	Corp	Community Assistance Unit		Compensation / Claims Specialist
Woody, Lindsey	Corp	Community Assistance Unit		Compensation / Claims Specialist
Centeno, Jennifer	NED	Community Assistance Unit		Humanitarian Assistance Specialist Lead
Littlejohn, Martie	GCD	Community Assistance Unit		Humanitarian Assistance Specialist Lead
Hayworth, Andi	Corp	Community Assistance Unit		Humanitarian Assistance Specialist Lead
McLean, Mat	Corp	Community Assistance Unit		Humanitarian Assistance Specialist Lead
Smith, Denise	SED	Community Assistance Unit		Humanitarian Assistance Specialist Lead
Tootell, Paul	NED	Community Assistance Unit		Humanitarian Assistance Specialist Lead
Sharma, Preeti	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Burnette, Michael	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Koehn, Greg	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Shepherd, Kathy	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Barwick, Lisa	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Greelish, Tamara	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Haddox, Laketa	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Avoyemi, Bukola	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Nelson, Charles	GCD	Community Assistance Unit		Humanitarian Assistance Specialist
Raley, Kevin	SED	Community Assistance Unit		Humanitarian Assistance Specialist
West, Tom	SED	Community Assistance Unit		Humanitarian Assistance Specialist
Zeledon, Julio	Corp	Community Assistance Unit		Humanitarian Assistance Specialist
Corporate Office Management				
Adams, Joe	Corp	CCOM		
Armstrong II, Harvey (Sonny)	Corp	CCOM		
Barbeauld, Rob	Corp	CMT Leader back-up		

Colonial Pipeline Company

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Barimo, Ken	Corp	Control Center Leader		
Baker, Steve	Corp	Public Information		
Belden, Doug	Corp	CMT Leader		
Brooks, Eve	Corp	Human Resources		
Brown, David	Corp	CCOM		
Cobb, Jamie	Corp	CCOM		
Dague, Kevin	Corp	CCOM		
Doudna, David	Corp	Finance		
Felt, Tim	Corp	President		
Henderson, Steve	Corp	Procurement		
Lackey, Meredith	Corp	Legal		
Mobley, Brock	Corp	CCOM		
Meyers, Doug	Corp	Director, BD		
Nguyen, Anh	Corp	Hydraulics SME		
Reese, Ray	Corp	HSS Leader		
Seagraves, Preston	Corp	CCOM		
Tompkins, Charles	Corp	Hydraulics SME		

Colonial Pipeline Company

HAZWOPER TRAINED PERSONNEL

Depending on an individual's role and responsibility during an emergency incident, certain HAZOPER training may be required. Section 6.01 of this manual details the necessary training courses and requirements for Colonial personnel.

Personnel required to complete HAZWOPER training must be able to provide proof of such training before being allowed to work within specific areas of response. Colonial's Training Services team maintains these records and will make them available when requested by a governing agency.

Future updates to this manual may include these training records if deemed prudent during an emergency response activity.

Colonial Pipeline Company

SOUTHEAST DISTRICT PHONE LIST

Last Name	First Name	Location	Job Title	Home Phone	Work Phone	Cell Phone
Alewine	Nathan	Belton	Operator A-Shift	[redacted]		
Amerson III	James	Greensboro Junction	Senior Field Project Manager	[redacted]	336-931-6024	[redacted]
Anderson	Stephen	Apes	Senior Operator	[redacted]		[redacted]
Andrews	Nathan	Atlanta Junction	Tank Farm Controller III		770-948-8700	[redacted]
Arnold	Terri	Atlanta Junction	Administrative Assistant	[redacted]	770-819-3551	[redacted]
Bagley	Douglas	Atlanta Junction	Associate Technician	[redacted]		[redacted]
Baker	Tiffany	Atlanta Junction	Inspector		770-819-3571	[redacted]
Barker	Lisa	Belton	Administrative Assistant		864-641-3610	[redacted]
Barker	Michael	Belton	Field Project Manager	[redacted]		[redacted]
Barnard	Timothy	Chattahoochee	Technician	[redacted]		[redacted]
Barrere	Wayne	Atlanta Junction	Tank Farm Controller I-Shift			[redacted]
Bassett	James	Atlanta Junction	Planner I	[redacted]	770-819-3572	[redacted]
Bates	Kevin	Atlanta Junction	Environmental Specialist			[redacted]
Berry	Douglas	Charlotte	Operator A-Shift			[redacted]
Black	Joshua	Belton	Senior Operator		864-332-8113	[redacted]
Blanton	Harold	Pelham	Inspector	[redacted]	205-685-6005	[redacted]
Blocker	Dixie	Knoxville	Senior Operator	[redacted]	865-584-1817	[redacted]
Boyan	Kenneth	Greensboro Junction	Senior Operator	[redacted]	336-931-6059	[redacted]
Bracy	Scotty	Charlotte	Corrosion Technician	[redacted]	704-393-6619	[redacted]
Briggs	Jason	Greensboro Junction	Technician	[redacted]	336-931-6028	[redacted]
Brooks	Keith	Atlanta Junction	Associate Technician	[redacted]	770-819-3556	[redacted]
Brown	Deeanna	Chattahoochee	Senior Operator	[redacted]	404-794-3768	[redacted]
Brown	Thomas	Greensboro Junction	Operator A-Shift	[redacted]		[redacted]
Brown	Gene	Macon	Technician	[redacted]		[redacted]
Bryant	Steven	Chattanooga Field Office	Inspector	[redacted]		[redacted]
Bryson	Stephen	Spartanburg	Senior Operator		864-585-6929	[redacted]
Bunn	Christopher	Pelham	Planner I	[redacted]	205-685-6017	[redacted]

Colonial Pipeline Company

SOUTHEAST DISTRICT PHONE LIST

Burkhart	Caryn	Pelham	Administrative Assistant		205-685-6003	(b) (6) [redacted]
Butler	Tammy	Pelham	Operator A-Shift	(b) (6) [redacted]		
Cameron	Lawrence	Charlotte	Operator A-Shift		704-392-8610	
Cannon	Gordon	Chattanooga Junction	Corrosion Program Manager		404-695-4855	
Carey	Larry	Atlanta Junction	Tank Farm Controller III	(b) (6) [redacted]	770-732-6870	
Carey	Dylan	Greensboro Junction	Associate Operator			
Cason	Wesley	Atlanta Junction	Technician	(b) (6) [redacted]	770-732-6899	
Castellanos	Jose	Charlotte	Operator A-Shift			
Causey	Steve	Atlanta Junction	Tank Farm Controller III		770-732-6877	
Cazares	Juan	Atlanta Junction	Senior Field Project Manager		770-819-3553	
Cloninger	Timothy	Charlotte	Operator A-Shift		704-392-8610	
Coan	Cecil	Atlanta Junction	Sr Engineer		770-732-6873	
Cole	Cody	Atlanta Junction	Associate Technician			
Conkle	Kerry	Pelham	Inspector	(b) (6) [redacted]	678-898-1177	
Conrad	Peter	Charlotte	Senior Operator		704-393-6828	
Cornett	Donald	Atlanta Junction	Lead Operator	(b) (6) [redacted]	770-732-6872	
Cortes	Edgar	Pelham	Technician		205-685-6013	
Cotten	Michael	Atlanta Junction	Inspector		404-963-9198	
Culbreath	John	Charlotte	Environmental Specialist		704-399-5259	
Cutting	Michael	Belton	Operations Manager		864-332-8105	
Darden	William	Greensboro Junction	Operator A-Shift	(b) (6) [redacted]		
Davis	Robert	Charlotte	Senior Operator		704-393-6822	(b) (6) [redacted]
Davis	Maranda	Spartanburg	Associate Operator			
Dellinger	Troy	Belton	Corrosion Technician			
Durr	Tiffani	Nashville	Senior Operator			
Easler	Jay	Spartanburg	Senior Operator	(b) (6) [redacted]	864-585-6929	
Eickmann	Carolee	Selma	Senior Operator			
Faulkner	Ollin	Pelham	Technician			

Colonial Pipeline Company

SOUTHEAST DISTRICT PHONE LIST

Fenech	Jason	Knoxville	Senior Operator	(b) (6) [redacted]	865-584-1817	(b) (6) [redacted]
Fine	Ronald	Spartanburg	Senior Operator - Right of Way		864-641-3614	
Fleming II	Stephen	Pelham	Inspector			
Foust	David	Greensboro Junction	Inspector			
Fowler Jr	Darl	Greensboro Junction	Operator A-Shift		336-931-6043	
Fuller	Mark	Pelham	Operator A-Shift			
Gainey	Ferenzo	Greensboro Junction	Associate Operator			
Gardner	Donald	Greensboro Junction	Operations Manager		336-931-6027	
Garriga	Evan	Spartanburg	Associate Technician			
Gibbons	Troy	Pelham	Operations Manager		205-685-6001	
Gilk	Alexander	Charlotte	Inspector		704-363-8464	
Godwin	Gary	Belton	Associate Operator			
Gose	Adam	Macon	Inspector			
Griffen	Lawrence	Pelham	Technician		205-685-6012	
Grooms	Brandon	Belton	Inspector		864-332-8104	
Hackney	William	Chattanooga Junction	Senior Operator			
Hall	Lennard	Nashville	Technician		615-297-0787	
Harlow	Val	Atlanta Junction	Sr Inspector		770-819-3558	
Harris	Bradley	Chattanooga Field Office	Inspector			
Harrison	Gregory	Chattanooga Field Office	Senior Field Project Manager		423-305-1194	
Hart	Isaac	Atlanta Junction	Associate Technician		770-732-6892	
Headrick	Russell	Chattanooga Office	Lead Technician		706-891-7589	
Hedgecock	James	Greensboro Junction	Senior Operator		336-931-6044	
Herndon	Joseph	Atlanta Junction	Tank Farm Controller I-Shift			
Hicks	Anthony	Greensboro Junction	Operator A-Shift			
Highfill	William	Greensboro Junction	Sr Inspector		336-931-6036	(b) (6) [redacted]
Hill	Charles	Pelham	Associate Technician		205-685-6015	
Horton	Albert	Chattanooga Field Office	Technician			

Colonial Pipeline Company

SOUTHEAST DISTRICT PHONE LIST

Jack	Robert	Chattahoochee	Inspector			(b) (6) [redacted]
Janney	Gregory	Atlanta Junction	Tank Farm Controller II-Shift	(b) (6) [redacted]		
Jernigan	Daniel	Macon	Senior Technician			(b) (6) [redacted]
Jessup	David	Greensboro Junction	Operator B-Shift			
Johnson	Mike	Charlotte	Lead Operator		704-393-6826	(b) (6) [redacted]
Junkins Jr.	Marty	Spartanburg	Technician		864-641-3611	
Kirby	Cory	Atlanta Junction	Tank Farm Controller II-Shift			
Kolar	Angela	Atlanta Junction	Director of Operations	(b) (6) [redacted]		
Konvicka	Bruce	Atlanta Junction	Tank Farm Controller II-Shift		770-732-6864	
Larimore	James	Greensboro Junction	Corrosion Technician II		336-931-6070	
Larimore	Daryl	Greensboro Junction	Inspector		336-931-6035	
Ledbetter	Stan	Greensboro Junction	Senior Technician		336-931-6032	
Leigh	Faron	Greensboro Junction	Environmental Specialist		336-931-6061	
Littleton	Joe	Pelham	Process Safety District Coord		205-664-0333	
Lollis	Jamie	Belton	Inspector		864-332-8112	
Long	Marty	Macon	Technician	(b) (6) [redacted]		
Lovvorn	John	Pelham	Field Project Manager		205-664-0033	
Lowie	James	Belton	Planner I		864-332-8103	
Lucear	Eric	Atlanta Junction	Senior Operator			
Madden	Roger	Belton	Lead Operator	(b) (6) [redacted]	864-332-8109	
Martin	Phillip	Belton	Technician		864-332-8107	
Maxwell	Jon	Belton	Operator A-Shift		864-332-8113	
Mc,	Michael	Greensboro Junction	Technician		336-931-6040	
McClure	Steve	Spartanburg	Senior Inspector			
McCuiston	James	Greensboro Junction	Senior Technician	(b) (6) [redacted]	336-931-6029	
McDougald	Kevin	Apex	Senior Operator			
McGee	Jesse	Charlotte	Associate Operator			
McGee	Garry	Greensboro Junction	Senior Operator	(b) (6) [redacted]	336-931-6064	

Colonial Pipeline Company

SOUTHEAST DISTRICT PHONE LIST

McLaughlin	Gerald	Pelham	Senior Operator	(b) (6) [redacted]	205-685-6008	(b) (6) [redacted]
Mercer	Mark	Pelham	Senior Technician		205-685-6010	
Monroe	Jeff	Atlanta Junction	Lead Technician		770-732-6871	
Morell	Chris	Knoxville	Technician			
Motley	Brian	Pelham	Corrosion Technician			
Neumeyer	Michael	Chattanooga Field Office	Field Project Manager			
Newton	Cody	Atlanta Junction	Tank Farm Controller I-Shift			
Parham	Conrad	Greensboro Junction	Operator B-Shift	(b) (6) [redacted]		
Parker	Mario	Greensboro Junction	Associate Operator			(b) (6) [redacted]
Pegram	Randy	Greensboro Junction	Technician	(b) (6) [redacted]		
Pelletier	Daniel	Nashville	Technician		615-297-0787	
Pierce	Charles	Chattanooga Office	Technician		706-891-7586	
Plunk	Keith	Chattahoochee	Technician		404-963-9206	
Pruitt	Cody	Greensboro Junction	Operator			
Pruitt	Darren	SED District Office - Albert P	Associate Director of Operations		336-339-1280	
Purvis	Steven	Pelham	Technician		205-685-6011	
Pyles	Thomas	Atlanta Junction	Tank Farm Controller I-Shift	(b) (6) [redacted]		
Rajbandith	Noudam	Greensboro Junction	Operator A-Shift			
Raley	Kevin	Chattanooga Junction	ROW Coordinator	(b) (6) [redacted]	706-891-7584	
Rasmussen	Joseph	Atlanta Junction	Measurement Specialist		770-819-3564	
Ray	Patrick	Atlanta Junction	Inspector			
Reed	Mathew	Athens Delivery	Corrosion Technician II		706-559-4611	
Rice	Steven	Greensboro Junction	Technician		336-931-6033	
Rissler	Patricia	Greensboro Junction	HSS Field Coordinator			
Roberts	Vince	Chattahoochee	Inspector	(b) (6) [redacted]		
Roberts	Terry	Pelham	Operator A-Shift			
Rushton	Todd	Spartanburg	Senior Operator		864-641-3602	
Ryans	Wallace	Chattanooga Junction	Senior Operator		706-891-7588	

Colonial Pipeline Company

SOUTHEAST DISTRICT PHONE LIST

Saunders	Robert	Greensboro Junction	Operator A-Shift	(b) (6) [redacted]	336-292-0427	
Schafer	Margaret	Greensboro Junction	Associate Field Project Manager		336-931-6062	(b) (6) [redacted]
Shaver	Christopher	Charlotte	Technician	(b) (6) [redacted]	704-393-6801	
Sheffield	Deon	Greensboro Junction	Operator A-Shift		336-931-6041	
Shipman	John	Greensboro Junction	Senior Operator		336-931-6064	
Shumpert	Jera	Atlanta Junction	Inspector	(b) (6) [redacted]	770-819-3559	(b) (6) [redacted]
Simmons	George	Greensboro Junction	Technician		336-931-6034	
Sisk	Perry	Chattahoochee	Sr Engineer	(b) (6) [redacted]		
Small	Christina	Greensboro Junction	Administrative Assistant		336-931-6072	
Smith	Jody	Atlanta Junction	Technician		770-732-6895	
Smith	Brian	Greensboro Junction	Associate Operations Manager		336-931-6077	
Stallings Jr	Bobby	Pelham	Lead Operator		205-685-6002	
Stewart	Jeff	Atlanta Junction	Inspector			
Stroupe	Jason	Atlanta Junction	Tank Farm Controller I-Shift			
Sullivan	Elizabeth	Belton	Operator A-Shift	(b) (6) [redacted]	864-332-8113	
Swafford	Scotty	Chattahoochee	Inspector			
Taylor	Benjamin	Pelham	Technician	(b) (6) [redacted]	205-685-6014	
Teller	Martie	Spartanburg	Technician			
Thomas	Stephen	SED District Office - Albert P	District Project Leader	(b) (6) [redacted]	336-931-6022	
Trotter	Timothy	Belton	Inspector			
Turner	Kelvin	Atlanta Junction	Senior Field Project Manager		770-819-3554	
VanNess Jr.	Paul	Greensboro Junction	Operator B-Shift		336-931-6026	
Virost	David	Greensboro Junction	Sr Engineer	(b) (6) [redacted]	336-931-6058	
Vreeland	Clyde	Greensboro Junction	Technician			
Walker	Karen	SED District Office - Albert P	Business Manager	[redacted] (	336-617-3243	
Walsh	Jade	Atlanta Junction	Tank Farm Controller I-Shift			
Walsh	Steven	Atlanta Junction	Senior Field Project Manager	(b) (6) [redacted]	770-819-3557	

Colonial Pipeline Company

SOUTHEAST DISTRICT PHONE LIST

Webber	Terrence	Pelham	Technician			(b) (6) [redacted]
West	Robert	Atlanta Junction	Operations Manager		770-819-3552	
West	William	Greensboro Junction	ROW Coordinator	(b) (6) [redacted]	336-931-6039	
White	Michael	Charlotte	Senior Technician		704-393-6820	
White	Walter	Nashville	Senior Operator		615-297-0787	
White	Christopher	Pelham	Operator A-Shift			
Wilkes	Shane	Chattahoochee	Technician		404-963-9213	
Williams	Steven	Belton	Technician	(b) (6) [redacted]	864-332-8114	
Williams	Timothy	Chattahoochee	Corrosion Technician II			
Williams	Michael	Pelham	Environmental Specialist		205-664-0035	
Wilson	Adam	Belton	Operator			
Wooten	Danny	Charlotte	Inspector		704-393-6827	
Wyatt	John	Chattanooga Field Office	District Environ. Program Mgr			
Yarbrough	Bradley	Chattahoochee	Senior Inspector			
Young	Thomas	Athens Delivery	Technician			
Young	Earl	Greensboro Junction	Inspector	(b) (6) [redacted]	336-931-6038	
Young Jr	John	Greensboro Junction	Lead Operator		336-931-6049	

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Apex Delivery

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES		TELEPHONE
NC Division of Water Quality	Emergency Hotline	800-858-0368
	Main	919-807-6300
	Raleigh Regional Office	919-791-4200
NC Division of Emergency Management	24 Hr Operations	800-858-0368
	Disaster Recovery Operations Center	919-715-8000
	Main Office	919-825-2500
NC State Highway Patrol	Communications	800-662-7956
	Wake County State Hwy Patrol Local Office	919-733-4400
	Main Office Patrol Headquarters	919-733-7952
NC Dept. of Labor	(OSHA Admin)	919-807-2900
		800-625-2267

COUNTY AGENCIES	TELEPHONE
Wake County Emergency Management Services	919-856-6480
Wake County EMS	919-856-6022
Wake County Hazmat Regional Response	919-431-1390
Johnston County Emergency Management Services	919-989-5050
Johnston County Sheriff	919-989-5000
Chatham County (Emergency Operations Center)	919-542-2911
Chatham County Sheriff, Fire & Rescue	919-542-2911
Harnett County Fire & Rescue	910-893-9111
Harnett County Sheriff	910-893-9111
NC State Highway Patrol (Harnett Co. Area) 24 Hrs	800-334-7411

CITY AGENCIES		TELEPHONE
Apex – Fire Dept. & Rescue		919-362-4001
Local Police	911	919-362-8661
	EMS	919-363-1577
RDU Airport – Airport Security Police, Fire & Rescue	Emergency Only	919-840-2111
Airport Authority	Non-Emergency	919-840-7510
	Administrative	919-840-2100
Selma – Police, Fire & Rescue	Emergency Only	919-934-9411
	Non-Emergency	919-965-8189
Lillington Police Dept	Emergency Only	910-893-9111
	Non-Emergency	910-893-3015

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Atlanta Junction

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802
US EPA – Atlanta Regional Administrator Heather McTeer Tony Matt Taylor, Chief, Removal OPS Section 24 Hr Emergency Response	404-562-8357 404-562-8759 404-562-8700
US National Park Service – Chattahoochee River National Recreation Area 24 hour Emergency Number - Dispatch Supervising Park Ranger – Jay Kolodzonski Chief of Park Operations – Scott Pfeniger Acting Chief of Planning and Resource Mgmt.- Charlie Jackson	678-538-1200 678-538-1273 O: 678-538-1269 C: (b) (6) [redacted] O: 678-538-1261 C (b) (6) [redacted] O: 678-538-1304 C: (b) (6) [redacted]
OSHA – Atlanta West Office	678-903-7301 800-321-OSHA

STATE AGENCIES	TELEPHONE
GEMA Region Seven Coordinator Sheri Russo - 1-800-TRY-GEMA 24 Hour	Cell (b) (6) [redacted] 404-635-7200 Fax: 404-635-7205
Georgia One Call	800-282-7411
Georgia DNR	404-656-4300
Georgia DNR EPD	404-656-4713

CITY AGENCIES	TELEPHONE
Austell Mayor – Joe Jerkins	770-944-4300/4328 (b) (6) [redacted] (Home)
Powder Springs Mayor – Pat Vaughn	770-943-1666
Smyrna Mayor – A. Max Bacon; Admin - Christy Ullman (770-319-5301) After Hrs (Police Department)	770-319-5302 770-434-9481
Lawrenceville Mayor – Judy Jordan Johnson Assistant	678-407-6576 678-407-6577

OTHER	TELEPHONE
Atlanta Airport – Atlanta Fire Dept , 720 Doug Davis Dr. Hapeville, GA AFD Wilmond Meadows – DOA-C4 Fire Assistant Chief wmeadowsr@atlantaga.gov AFD Inspection Chief Alan Burton – DOA Chief of Inspections Alan.Burton@atlanta-airport.com AFD Chief Rod Smith –City of Atlanta Special Operations Assistant Fire Chief rsmith@atlantaga.gov	 O: 404-382-1072 C (b) (6) [redacted] O: 404-382-1077 C: (b) (6) [redacted] O: 404-382-1073 C: (b) (6) [redacted]
Atlanta Airport Centralized Command and Control Center 6000 North Terminal Pkwy. Atlanta, GA 30320 C-4 Gus Hudson DOA Centralized Command and Control Ctr Executive Augustus.Hudson@atlanta-airport.com C-4 Penny Roberts DOA C-4 Dispatch Supervisor Police Penny.Roberts@atlanta-airport.com	O: 404-530-6800 O: 404-382-1044 C (b) (6) [redacted] O C (b) (6) [redacted]

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Belton Junction

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802
US EPA – Atlanta Regional Administrator 24 Hr Emergency Response	404-562-8357 404-562-8700

STATE AGENCIES	TELEPHONE
Georgia Department of Natural Resources	404-656-4300
State of SC DHEC Emergency Response 24-Hour	803-253-6488 888-481-0125
Georgia Dept of Natural Resources (Commissioner's Office)	404-656-3500
One Call – GA	800-282-7411
One Call – SC	800-922-0983

COUNTY AGENCIES	TELEPHONE
Anderson County Rescue Squad	864-260-4444
Anderson County Emergency Preparedness Chief – Taylor Jones	864-260-4646
Environmental Quality Control Anderson & Oconee SC	864-260-5569
Athens/Clarke County Fire and Emergency Services	706-613-3360

CITY AGENCIES	TELEPHONE
Belton Fire Dept	864-338-7048
Belton Police Dept	864-338-8448

Charlotte Delivery Facility

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802
US EPA – Atlanta Regional Administrator 24 Hr Emergency Response	404-562-8357 404-562-8700

STATE AGENCIES	TELEPHONE
NC Dept. of Environmental & Natural Resources 8am-5pm	877-623-6748
NC Division of Emergency Response 24 Hrs	800-858-0368
NC State Highway Patrol 24 Hrs	800-572-8765
NC Dept of Labor – OSHA	800-625-2267
COUNTY AGENCIES	**TELEPHONE**
Mecklenburg County EMS	704-943-6200
Mecklenburg County 311 Citizen Hotline	704-336-5500
Mecklenburg County Sheriff	704-336-2543

CITY AGENCIES	TELEPHONE
Charlotte Fire Information	704-336-2441
Charlotte City Police 24 hour Emergency Line	704-336-3237 704-336-2352

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Chattanooga

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802
US EPA – Atlanta Regional Administrator 24 Hr Emergency Response	404-562-8357 404-562-8700
OSHA – Atlanta West Office After Hours www.osha.gov	678-903-7301 800-321-6742
Army Corp of Engineers – Regulatory Branch	615-369-7500
Chief of Water Management Section	615-736-5675

STATE AGENCIES	TELEPHONE
TN Emergency Management Agency	615-741-0001
TN One Call	800-351-1111 or 811
TN Highway Patrol – Chattanooga District Office	423-634-6890
Fire Marshall	615-741-2981
TN DOT	423-892-3430
GA One Call	800-282-7411 or 811

COUNTY AGENCIES	TELEPHONE
Catoosa County, GA	
Catoosa Utility District	706-937-4121
Georgia State Patrol	706-272-2200
Walker County, GA	
Georgia State Patrol	706-638-5501
Floyd County, GA	
Water Dept	706-291-5172
Loudon County, TN	
Sweetwater Utility Board	423-337-5081
Lenoir City Utility Board	865-986-6591
Knox County, TN	
Rescue Squad	865-546-4821
TN State Patrol	865-594-5800
TN One Call	800-351-1111
Knoxville Utilities Board	865-524-2911

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Doraville/Chattahoochee

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802
US EPA – Atlanta Regional Administrator Heather McTeer Tony Matt Taylor, Chief, Removal OPS Section 24 Hr Emergency Response	404-562-8357 404-562-8759 404-562-8700
OSHA – Atlanta West Office After Hours	678-903-7301 800-321-OSHA
US National Park Service – Chattahoochee River National Rec Area 24 hour Emergency Number - Dispatch Supervising Park Ranger – Jay Kolodzonski - C: [redacted] Chief of Park Operations – Scott Pfeniger - C: [redacted] Acting Chief of Planning and Resource Mgmt.- Charlie Jackson	678-538-1200 678-538-1273 O: 678-538-1269 O: 678-538-1261 O: 678-538-1304 C: [redacted]

STATE AGENCIES	TELEPHONE
GEMA Region Seven Coordinator Sheri Russo 24 Hour 1-800-TRY-GEMA	Cell [redacted] 404-635-7200 Fax: 404-635-7205
GA One Call	800-282-7411
GA DNR	404-656-4300
GA DNR EPD	404-656-4713

CITY AGENCIES	TELEPHONE
Tallapoosa – Mayor Pete Bridges Mainline	770-574-2345
Tallapoosa City Manager Phillip Eidson	Cell: [redacted]
Carrollton – Mayor Wayne Garner	770-830-2000
Villa Rica Mayor – J. Allen Collins	770-459-6090
Temple Mayor – Lester Harmon	770-562-3369 x 103
East Point Mayor – Earnestine Pittman East Point City Manager – Jannquell Peters	404-270-7093 404-270-7017
Hapeville City Administrator Alice Shepard Mayor – Alan Hallman / City Manager	404-669-2100 404-669-2117
Hiram Mayor & City Administrator – Doris A. Dewey	770-943-3726
Powder Springs Mayor – Pat Vaughn	770-943-1666
Smyrna Mayor – Max Bacon	770-319-5302
Atlanta Mayor – Kasim Reed	404-330-6100
Forest Park City Manager Mayor's Office Chief of Police: Dwayne Hobbs	404-366-4720 404-608-2345 404-366-7280
College Park Mayor – Jack P. Longino/City Manager – Terrence R. Moore Executive Assistant – Wanda Anderson	404-669-3756 404-669-3755
Doraville Mayor – Donna Pittman	770-451-8745 x23 Home: [redacted] Cel [redacted]
Bremen City Manager Perry Hicks Mayor Sharon Sewell - C: [redacted]	678-821-1233 H: [redacted]

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Epes, AL

FEDERAL AGENCIES		TELEPHONE
National Response Center		800-424-8802
EPA – (Atlanta)	24-Hour Emergency Response	404-562-8700

STATE AGENCIES	TELEPHONE
OSHA – Alabama	205-731-1534 or 800-321-6742

Fayetteville

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES		TELEPHONE
NC Division of Water Quality	Emergency Hotline Main Fayetteville Regional Office	800-858-0368 919-807-6300 910-433-3300
NC Division of Emergency Management	24 Hr Operation Disaster Recovery Operations Center Main Office	800-858-0368 919-715-8000 919-825-2500
NC State Highway Patrol	Communications Cumberland County State Hwy Patrol Local Office Main Office Patrol Headquarters	800-334-7411 910-486-1334 919-733-7952
NC Dept. of Labor	(OSHA Admin)	919-807-2900 800-625-2267

COUNTY AGENCIES	TELEPHONE
Cumberland County Emergency Management Services	910-321-6736
Harnett County LEPC	910-893-7580
Harnett County Fire & Rescue	910-893-9111
Harnett County State Hwy Patrol Local Office Day NC State Highway Patrol (Harnett Co. Area) 24 Hrs	910-893-5704 800-334-7411

CITY AGENCIES		TELEPHONE
Fayetteville Highway Patrol Comm., Fire Dept, County Police, Rescue		910-486-1334
Lillington Police Dept	Emergency Only Non-Emergency	910-893-9111 910-893-3015

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Gaffney Station

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES	TELEPHONE
SC Emergency Response Section, HAZMAT Bureau Mgr – Chris Staton	803-896-4111
SC Dept. of Health & Environmental Controls 24 Hr	888-481-0125
SC Dept. of Natural Resources	803-734-4007
SC Dept. of Labor, Licensing, & Regulations – OSHA	803-896-4300

COUNTY AGENCIES	TELEPHONE
Cherokee County Emergency Preparedness Director – Rick Peterson	864-487-2590
Sheriff's Office Cherokee 24 Hr	864-487-2747
York County Sheriff's Dept.	803-628-3056
York County Emergency Preparedness Division Director – Gary Loflin	803-326-2300

CITY AGENCIES	TELEPHONE
Gaffney Fire Dept	864-487-8516
Blacksburg Police Dept	864-839-2331
Blacksburg Fire Dept.	864-839-1608
Police – Gaffney	864-489-8115
Sheriff – Gaffney (Cherokee County)	864-487-2503
Spartanburg City	864-596-3690
Spartanburg Water Sewer Dept Emergency	864-585-8296

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Gastonia Station

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES		TELEPHONE
NC Dept of Environmental & Natural Resources	8am-5pm	877-623-6748
NC Division of Emergency Response	24 Hrs	800-858-0368
NC State Patrol	24 Hrs	800-572-8765
NC Dept. of Labor		800-625-2267

COUNTY AGENCIES	TELEPHONE
Gaston County Emergency Management After Hours Dir Tommy Almond	704-866-3350 704-866-3300 770-862-6240
Environmental Health	704-853-5200
Gaston County Sheriff	704-869-6800
Gaston County EMS	704-866-3212

CITY AGENCIES	TELEPHONE
Fire Marshall	704-866-3355
Gaston Police Headquarters Non-Emergency	704-866-3320 704-866-3300

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Greensboro Junction

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES	TELEPHONE
NC Division of Water Quality Emergency Hotline Main Winston-Salem Regional Office	800-858-0368 919-807-6300 336-771-5000
NC Division of Emergency Management 24 Hr Operations Disaster Recovery Operations Center Main Office	800-858-0368 919-715-8000 919-825-2500
NC State Highway Patrol Communications Guilford County State Hwy Patrol Local Office Main Office Patrol Headquarters	336-334-5500 336-256-2058 919-733-7952
NC Dept. of Labor (OSHA Admin)	919-807-2900 800-625-2267

COUNTY AGENCIES	TELEPHONE
Guilford County Sherriff	336-641-3694
Guilford County Emergency Services 911	336-373-2933
Guilford County LEPC Mindy Lepard, Admin Asst.	336-834-4903
Greensboro Emergency Services Coordinator – Don Campbell	336-641-6569
Alamance County Fire Marshall Emergency Medical Services	336-227-1365 336-570-6796
Alamance County Sheriff's Dept. Non-Emergency	336-570-6777
Davidson County Emergency Services 911 Emergency Management Coordinator	336-242-2270 336-249-0131 336-242-2280
Rockingham County Fire Marshall Emergency Management Services	336-634-3014 336-634-3017
Rockingham County Sheriff's Dept. Non-Emergency	336-634-3300

CITY AGENCIES	TELEPHONE
High Point - Emergency Management Office Training Center Fire Dept. Non-Emergency - Police Dept. Non-Emergency	336-883-3358 336-883-3374 336-883-3224
Greensboro – Police Non-Emergency Fire Dept Airport Security Manager- Michael Wood Airport Authority	336-373-2222 336-373-2356 336-665-5642 336-665-5600

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Hickory Grove Station

FEDERAL AGENCIES		TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)		800-424-8802

STATE AGENCIES		TELEPHONE
VA Dept. of Environmental Quality VA Toll Free	8am-5pm	804-698-4000 800-592-5482
VA Dept. of Emergency Management VEOC-Emergency Operations Center	Toll Free	804-674-2400 800-468-8892
VA State Police	Halifax Co.	804-674-2000 434-476-1887
VA Dept. of Labor & Industry – OSHA VA Dept. of Game & Inland Fisheries VA Dept of Forestry	Southwest Region Fire Chief Richard Thomas	540-562-3580 804-367-1000 540-459-3151

COUNTY AGENCIES		TELEPHONE
Halifax Joint LEPC		434-476-3300
Halifax County Sherriff's Dept.	911 Dispatcher	434-476-3334
Pittsylvania County LEPC	Director – James Davis	434-432-7921 434-432-7920
Pittsylvania County Sheriff Pittsylvania Fire Dept.	Chatham/Danville Area	434-432-7931 434-432-2222

CITY AGENCIES		TELEPHONE
Halifax Fire Dept. & Rescue Squad		434-476-3334
City of Danville – Emerg. Svcs & Comm.		434-799-6535
Danville Water Treatment Plant	24 Hrs	434-799-6473

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Kannapolis Station

FEDERAL AGENCIES		TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)		800-424-8802

STATE AGENCIES		TELEPHONE
NC Dept. of Environment & Natural Resources	8am-5pm	877-623-6748
NC Division of Emergency Management	24 Hrs	800-858-0368
NC State Highway Patrol	24 Hrs	800-572-8765
NC Dept. of Labor – OSHA		800-625-2267

COUNTY AGENCIES		TELEPHONE
Sheriff's Dept – Cabarrus County		704-920-3000
Cabarrus County Emergency Management	Director Robert Smith	704-920-2143
Cabarrus County EMS		704-920-2605

CITY AGENCIES	TELEPHONE
Kannapolis Dispatch for Fire and Police	704-933-2121
Kannapolis Police	704-920-4000
Kannapolis Fire Dept	704-920-4260

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Lexington Station

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES	TELEPHONE
NC Division of Water Quality Emergency Hotline	800-858-0368
Main	919-807-6300
Winston-Salem Regional Office	336-771-5000
NC Division of Emergency Management 24 Hr Operations	800-858-0368
Disaster Recovery Operations Center	919-715-8000
Main Office	919-825-2500
NC State Highway Patrol Communications	704-855-1047
Davidson County State Hwy Patrol Local Office	336-249-0247
Main Office Patrol Headquarters	919-733-7952
NC Dept. of Labor (OSHA Admin)	919-807-2900
	800-625-2267

COUNTY AGENCIES	TELEPHONE
Davidson County Emergency Services 911	336-242-2270
Director: Larry James	336-249-0131
Emergency Management Coordinator – Alton Hanes	336-242-2280
Davidson Hazmat	336-242-2270
Davidson County LEPC Chairman – Paul Jarrett	336-242-2270
Davidson County Sheriff's Dept.	336-242-2100
Davidson County Fire Marshall	911

CITY AGENCIES	TELEPHONE
911 Communications (Fire Dept., Police) - Davidson County 24 Hr	336-249-0131
High Point - Emergency Management Office	336-883-3542
- Fire Dept. Non-Emergency	336-883-3374
- Police Dept. Non-Emergency	336-883-3224
Lexington - Fire Dept.	336-248-3935
- Police Dept.	336-243-3302

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Lillington Station

FEDERAL AGENCIES		TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)		800-424-8802

STATE AGENCIES		TELEPHONE
NC Division of Water Quality	Emergency Hotline	800-858-0368
	Main	919-807-6300
	Fayetteville Regional Office	910-433-3300
NC Division of Emergency Management	24 Hr Operations	800-858-0368
	Disaster Recovery Operations Center	919-715-8000
	Main Office	919-825-2500
NC State Highway Patrol	Communications	800-334-7411
	Harnett County State Hwy Patrol Local Office	910-893-5704
	Main Office Patrol Headquarters	919-733-7952
NC Dept. of Labor	(OSHA Admin)	919-807-2900
		800-625-2267

COUNTY AGENCIES		TELEPHONE
Harnett County LEPC		910-893-7580
Harnett County Emergency Management Services		910-893-7580
Harnett County EMS	Non-Emergency	910-893-7563
Cumberland County Emergency Management Services		910-321-6736
Cumberland County Sherriff	Day	910-323-1500
Night		910-677-5400
Wake County Emergency Management Services		919-856-6480
Johnston County Emergency Management Services		919-989-5050

CITY AGENCIES		TELEPHONE
Lillington Police Dept	Emergency Only	910-893-9111
	Non-Emergency	910-893-3015
Lillington – Fire Dept.	Non-Emergency	910-893-9342
Fayetteville Highway Patrol Comm., Fire Dept, County Police, Rescue		910-486-1334
Selma – Police, Fire & Rescue	Emergency Only	919-934-9411
	Non-Emergency	919-956-8189

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Macon

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802
US EPA – Atlanta Regional Administrator – A. Stanley Meiburg Matt Taylor, Chief, Removal OPS Section 24 Hr Emergency Response	404-562-8357 404-562-8759 404-562-8700
OSHA – Atlanta West Office (middle GA) After Hours	678-903-7301 800-321-6742
OSHA - Savannah Office (South GA) After Hours	912-652-4393 800-321-6742

STATE AGENCIES	TELEPHONE
GA One Call	800-282-7411
GA DNR EPD 404-656-4713	404-657-5947
Emergency GA EPD	800-241-4113
GEMA Region 4 Coordinator: Ed Westbrook	Cell: (b) (6) [redacted]

COUNTY AGENCIES	TELEPHONE
Fayette County Administrator – Steven A. Rapson / Clerk: Tamela White	770-305-5100/5103
Clayton County – Chairman Jeffrey Turner	770-477-3208 770-472-8122
Henry County – Chairman Tommy N. Smith	770-288-6001
Lamar County – City Commission Chairman Jay Matthews	770-358-5146
Monroe County - Commission Chairman Mike Bilderback	478-994-7000
Bibb County – Commission Chairman Samule F. Hart, Sr.	478-621-6345
Crawford County – Commission Chairman Dean Fripp	478-836-9065
Peach County – Commission Chairman Melvin Walker, Jr	478-825-2535
Macon County – Commission Chairman Richmond Felton	478-967-2434
Sumter County – Commission Chairman Randy Howard	229-853-2856
Dougherty County – Commission Chairman Jeff Sinyard	229-435-6258
Spalding County – Commission Chairman Gwen Flowers Taylor	770-467-4232
Mitchell County – Commission Chairman Benjamin Hayward	229-336-2000
Lee County – Commission Chairman Rick Muggridge	229-759-6000
Schley County – Commission Chairman Douglas Jamieson	229-937-2609
Decatur County – Commission Chairman Frank Loeffler	229-248-3030
Baker County- Commission Chairman Constance Hobbs	229-734-3000

CITY AGENCIES	TELEPHONE
Griffin – City Manager Kenny Smith	770-229-6425
Forsyth – Mayor John T. Howard, III	478-994-5649
Macon – Mayor Robert Reichert	478-751-7170
Fort Valley – Mayor Barbara Williams	478-825-8567
Montezuma – Mayor Willie James Larry	478-472-8144
Marshallville – Mayor William Massee	478-967-2535
Oglethorpe – Mayor James Tungate	478-472-6485
Americus – Mayor Barry Blount	229-924-4411
Albany – Mayor Dorothy Hubbard	229-431-3244
Bainbridge Mayor Edward Reynolds	229-248-2000

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Nashville

FEDERAL AGENCIES		TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)		800-424-8802
US EPA – Atlanta Regional Administrator Emergency Response		404-562-8357 404-562-8700
Army Corps of Engineers – Regulatory Branch		615-736-5181
TVA Chief Reservoir Operations		865-632-6065
United States Coast Guard – Marine Safety Detachment		615-736-5421
OSHA – Federal	Emergency	800-321-6742

STATE AGENCIES		TELEPHONE
OSHA – State of TN Local	Emergency	800-249-8510 615-741-2793
Civil Defense & Emergency Preparedness		615-741-0001
Conservation Dept. – Groundwater Protection		615-532-0761
TDEC Water Pollution Control Office – Nashville		615-532-0625
Fire Marshall		615-741-2981
TN One Call		615-366-1987 or 800-351-1111
TN Dept. of Transportation Region II – Coffee County Region III – Davidson & Rutherford Counties		615-741-2414 423-892-3430 615-350-4300

COUNTY AGENCIES		TELEPHONE
Nashville/Davidson County Nashville International Airport Captain Quarrels	Security	615-275-1703 615-275-1479 615-504-1688
TN Highway Patrol	Non-Emergency	615-741-3181
Nashville Mayor's Office – Karl Dean		615-862-6000
Nashville Electric Service Non-Emergency – 24 Hours	Emergency	615-234-0000 615-736-6900
Piedmont Natural Gas	Non-Emergency	800-752-7504
AT&T Telephone	Residential Business	877-737-2478 866-620-6900
Metro Water Service	All Calls	615-862-4600
Murfreesboro/Rutherford County Murfreesboro Mayor – Tommy Bragg		 615-849-2629
Middle TN Electric After Hours	8am-5pm	615-893-7570 615-849-2162
Murfreesboro Electric Co.	8am-5pm	615-893-5514
Atmos Energy		888-824-3434
Murfreesboro Water & Sewer		615-890-0862
Consolidated Utility – Water After Hours	8am-5pm	615-893-7225 615-893-7230
Coffee County		

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Emergency Communication Center	931-728-9555
United Regional Medical Center	931-728-3586
Manchester Medical Center	931-728-6354
Duck River Electric Non-Emergency	931-728-7548 931-728-7547
Duck River Utility Commission – Water Dept.	931-455-6458
Elk River Utility – Gas Company 8am-5pm After Hours	931-728-3332 931-455-9311
Frontier Communications	800-921-8104
Tullahoma Utilities Board	931-455-4515
Ben Lomand Telephone Company	931-668-4131
Manchester Water Dept.	931-728-1273
Hillsville Utility District	931-728-1242
Grundy County 8am-5pm Ben Lomand – Telephone Company	931-668-4131
Big Creek Utility	931-779-3751
Sequachee Valley Electric – Coalmont After Hours	931-592-9500 931-592-2511
Marion County Sequachee Valley Electric Co. After Hours	423-837-8605 888-421-7832
Jasper City Water After Hours	423-942-3111 423-942-2525

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Pelham

FEDERAL AGENCIES		TELEPHONE
National Response Center		800-424-8802
Coast Guard National Command Center –Washington, D.C. District Seven Command Center (FL,GA,SC)	 Emergencies	 800-DAD-SAFE 305-415-6800
EPA – (Atlanta)		404-562-8700
OSHA – Birmingham Office		205-731-1534
(After Hours Emergency)		800-321-6742

STATE AGENCIES	TELEPHONE
Alabama One-Call	800-292-8525

COUNTY/PARISH AGENCIES		TELEPHONE
Sumter County EMA		205-652-6347
Livingston Fire Dept.		205-652-9777
Livingston Police Dept.		205-652-9525
Sheriff's Dept. – Sumter County		205-652-7984
Shelby County Commission		205-669-3740
Shelby Baptist Medical Center		205-620-8100
AM Care Ambulance		205-956-1103
State Police		205-322-4691
Emergency Management Cell	Hub Harvey	205-669-3999 205-913-4024
Shelby County 911		205-439-6911
Talledega County Commission	Chairman – Jimmy Roberson	256-362-1357
Jefferson County Department of Health		205-933-9110
State Police – Jefferson County	Sheriff Mike Hale	205-325-5700

CITY AGENCIES		TELEPHONE
Office of the Mayor	Mayor Hattie Edwards	205-372-4212
Police Chief	Chief Tommy Thomas	205-620-6550
EMA Warning Point		205-439-6918
Moundville City Hall – Office of the Mayor	Mayor Tony Lester	205-371-2641
Vance – Office of the Mayor	Mayor Keith Mahaffey	205-553-8278
West Blocton Office of the Mayor	Mayor Gary Donner	205-938-7622
Fire Chief – West Blocton	Joe McCool	205-938-7622
Helena – Office of the Mayor	Mayor Mark Hall	205-663-2161
Pelham – Office of the Mayor	Mayor Gary Waters	205-620-6403
Birmingham – Office of the Mayor	William A. Bell Sr.	205-254-2277
Birmingham Council President	Marcus Lundy	205-254-2294
Shelby County Water Services		205-678-9847
Harpersville - Office of the Mayor	Mayor Theoangelo Perkins	205-672-9961
Shelby County Sheriff	Sheriff Chris Curry	205-669-4181
Vincent – Office of the Mayor	Mayor Ray McAllister	205-672-2261
Oxford – Office of the Mayor	Mayor Leon Smith	256-831-7510
Heflin City Hall – Office of the Mayor	Mayor Rudy Rooks	256-463-2290

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Raleigh-Durham

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES		TELEPHONE
NC Division of Water Quality	Emergency Hotline	800-858-0368
	Main	919-807-6300
	Raleigh Regional Office	919-791-4200
NC Division of Emergency Management	24 Hr Operations	800-858-0368
	Disaster Recovery Operations Center	919-715-8000
	Main Office	919-825-2500
NC State Highway Patrol	Communications	800-662-7956
	Wake County State Hwy Patrol Local Office	919-733-4400
	Main Office Patrol Headquarters	919-733-7952
NC Dept. of Labor	(OSHA Admin)	919-807-2900
		800-625-2267

COUNTY AGENCIES	TELEPHONE
Wake County Emergency Management Services	919-856-6480
Wake County Hazmat Regional Response	919-431-1390
Johnston County Emergency Management Services	919-989-5050
Johnston County Sheriff	919-989-5000
Harnett County LEPC	910-893-7580
Chatham County LEPC	919-542-2911
Chatham County Sheriff, Fire & Rescue	919-542-2911

CITY AGENCIES		TELEPHONE
Apex – Fire Dept. & Rescue		919-362-4001
Local Police	911	919-362-8661
EMS		919-363-1577
RDU Airport – Airport Security Police, Fire & Rescue	Emergency Only	919-840-2111
Airport Authority	Non-Emergency	919-840-7510
	Administrative	919-840-2100
Selma – Police, Fire & Rescue	Emergency Only	919-934-9411
	Non-Emergency	919-965-8189
Lillington Police Dept	Emergency Only	910-893-9111
	Non-Emergency	910-893-3015

Reidsville Station
Abandoned

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Selma Delivery

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES		TELEPHONE
NC Division of Water Quality	Emergency Hotline	800-858-0368
	Main	919-807-6300
	Raleigh Regional Office	919-791-4200
NC Division of Emergency Management	24 Hr Operations	800-858-0368
	Disaster Recovery Operations Center	919-715-8000
	Main Office	919-825-2500
NC State Highway Patrol	Communications	800-662-7956
	Johnston County State Hwy Patrol Local Office	919-934-2186
	Main Office Patrol Headquarters	919-733-7952
NC Dept. of Labor	(OSHA Admin)	919-807-2900
		800-625-2267

COUNTY AGENCIES	TELEPHONE
Wake County Emergency Management Services	919-856-6480
Wake County Hazmat Regional Response	919-431-1390
Johnston County Emergency Management Services	919-989-5050
Harnett County LEPC	910-893-7580

CITY AGENCIES		TELEPHONE
Selma – Police, Fire & Rescue	Emergency Only	919-934-9411
	Non-Emergency	919-965-8189
Apex – Fire Dept. & Rescue		919-362-4001
Local Police	911	919-362-8661
EMS		919-363-1577
RDU Airport – Airport Security Police, Fire & Rescue	Emergency Only	919-840-2111
Airport Authority	Non-Emergency	919-840-7510
	Administrative	919-840-2100
Lillington Police Dept	Emergency Only	910-893-9111
	Non-Emergency	910-893-3015
Lillington – Fire Dept.	Non-Emergency	910-893-9342
Fayetteville Highway Patrol Comm., Fire Dept, County Police, Rescue		910-486-1334

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Simponsville Station

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES	TELEPHONE
SC Dept of Health & Environmental Controls 24 Hrs	888-481-0125
SC State Highway Patrol	803-896-7920
SC Emergency Response Section, HAZMAT Bureau Mgr - Chris Staton	803-896-4111
SC Dept. of Natural Resources	803-734-4007
SC Dept. of Labor, Licensing & Regulations – OSHA	803-896-4300
SC Highway Patrol Spartanburg County	864-587-4700

COUNTY AGENCIES	TELEPHONE
Greenville County Sheriff's Office 24 Hrs	864-271-5210
Greenville County Office of Emergency Management	864-467-2680
Spartanburg Emergency Management Division Manager - Doug Bryson	864-595-5366 864-384-0826
Laurens County Emergency Management Agency Director Joey Avery	864-984-4731
Laurens County Sheriff's Dept. 24 Hrs	911:864-984-2523 864-984-4967
Laurens County Fire Dept.	864-984-3624

CITY AGENCIES	TELEPHONE
Donaldson Center Fire Dept.	864-277-1429
Canebrake Fire Dept.	864-862-1100
City of Greenville Fire Dept	864-467-4445
Simpsonville Fire Dept.	864-967-9545
Simpsonville Police Dept	864-967-9536
Spartanburg City Fire Dept.	864-596-2150

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Spartanburg Delivery

FEDERAL AGENCIES	TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)	800-424-8802

STATE AGENCIES		TELEPHONE
SC Dept of Health & Environmental Controls	24 Hrs	888-481-0125
SC Emergency Response Section, HAZMAT Bureau	Mgr - Chris Staton	803-896-4111
SC Dept. of Natural Resources		803-734-4007
SC Dept. of Labor, Licensing & Regulations – OSHA		803-896-4300
SC Highway Patrol		864-587-4700

COUNTY AGENCIES		TELEPHONE
County Emergency Preparedness Department	Director – Doug Bryson	864-595-5365
Spartanburg County Sheriffs Office	Non Emer. 24 Hrs	864-596-2222
Spartanburg County Highway Patrol		864-587-4700
Spartanburg City Fire Dept	Chief Blackwell	864-596-2084
Spartanburg Dept. of Health & Environmental Controls (Animal Control)		864-596-3582
Spartanburg Sanitary Sewer District (Emergency)		864-582-3250

CITY AGENCIES	TELEPHONE
Roebuck Fire Dept.	864-574-5676
Pacolet Fire Dept. Station I	864-474-3054
Croft Fire Dept.	864-582-7638
Glenn-Springs/Pauline Fire Dept.-Station I (Station II – 864-591-2204)	864-591-2206
Glendale Fire Dept.	864-579-3804
Poplar Springs Fire Dept.	864-574-6554

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND, LOCAL AGENCIES

Witt Station

FEDERAL AGENCIES		TELEPHONE
National Response Center (EPA, DOT & US Coast Guard)		800-424-8802

STATE AGENCIES		TELEPHONE
VA Dept. of Environmental Quality	8am-5pm Toll Free	804-698-4000 800-592-5482
VA Dept. of Emergency Management Center	VEOC-Emergency Operations VA Toll Free	804-674-2400 800-468-8892
VA State Police	Pittsylvania Co.	804-674-2000 434-432-7287
VA Dept. of Labor & Industry – OSHA	Southwest Region	540-562-3580
VA Dept. of Game & Inland Fisheries	Jared Sims - Office - Cell	804-367-1000 540-899-4169 (b) (6) [redacted]
VA Dept of Forestry	Fire Chief Richard Thomas	540-459-3151

COUNTY AGENCIES		TELEPHONE
Pittsylvania County LEPC	Director – James Davis	434-432-7921 434-432-7920
Pittsylvania County Sheriff Pittsylvania Fire Dept.	Chatham/Danville Area	434-432-7931 434-432-2222
Halifax Joint LEPC		434-476-3300 434-476-3336
Halifax County Sherriff's Dept.	911 Dispatcher	434-476-3334

CITY AGENCIES		TELEPHONE
City of Danville – Emerg. Svcs & Comm.	Director: Asst Chief Dishman 24 Hr ECC Fire Station One	434-799-5226 434-799-6535 434-799-5111 434-799-5226
Danville Water Treatment Plant	24 Hrs	434-799-6473
Halifax Fire Dept. & Rescue Squad Danville Sheriff's Office – Mike Mondul		434-476-3334 434-799-5135

Colonial Pipeline Company

OIL SPILL RESPONSE ORGANIZATIONS

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE NUMBERS
Hepaco, Inc.	Charlotte, NC Atlanta, GA Augusta, GA Raleigh, NC Birmingham, AL Greenville, SC Chattanooga, TN Knoxville, TN Nashville, TN http://www.hepaco.com/	Emergency Richard Horton Clem Schimikowski	800-888-7689 rhortonjr@hepaco.com 704-598-9782 704-598-9787 770-934-1180 706-772-9900 919-719-1603 205-957-2207 864-220-0700 423-624-9210 865-219-0840 615-882-0033
Marion Environmental	Chattanooga www.marionenv.com	Paul Van Alstyne	423-499-4919 888-888-8149
Marine Spill Response Corporation (MSRC)	220 Spring Street, Suite 500 Herndon, VA www.msrc.org	Judith Roos	703-326-5617 – (Office) (b) (6) [redacted] (Cell) 703-326-5660 – (Fax) 800-645-7745 – (24-hour) 800-259-6772 – (24-hour) 732-417-0175 – (24-hour) 703-326-5609 – (24-hour)
SWS Environmental	2211 St. Andrew Blvd. Panama City, FL 32405 Mableton, GA www.swsenvironmental.com	Harry Marsh Jamie Michael	850-234-8428 (Corp.) 877-742-4215 (24-hour) Jamie.michael@eaglesws.com 404-472-1107
United States Environmental Services (USES)	Memphis, TN Birmingham, AL Mobile, AL Jackson, MS www.usesgroup.com	24 Hour #	888-279-9930 662-280-3232 205-663-8737 251-662-3500 601-372-3232
W.E.L.	So. VA www.welinc.com		800-847-2455

Colonial Pipeline Company

OIL SPILL RESPONSE ORGANIZATIONS

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE NUMBERS
OTHER EMERGENCY RESPONSE CONTRACTORS:			
Tri-State Bird Rescue & Research	110 Possum Hollow Road Newark, DE 19711 www.tristatebird.org	After hours:	302-737-9543 – 7 days 9 am to 5 pm EST 1.800.424.8802 (NRC)
Clean Harbors Environmental Services, Inc.	MA NC VA www.cleanharbors.com		800-645-8265 781-792-5000 336-342-6106 336-861-4149 804-843-2180
J.B. Russell Environmental Services	210 Alice Street Spartanburg, SC 29303 www.jbrusa.com	Steve Rivers Rex Russell Steve Ives	864-583-2717 (Office) 800-583-3019 (24-hour) 864-809-3255 864-809-3259
HAZ-MAT Transportation and Disposal, Inc.	Charlotte, NC www.hazmatnc.com	Emergency Jack Holder Anthony Hardiman	800-941-9289 704-332-5600
Containment Control, Inc. (CCI)	Salisbury, NC www.cci-env.com		888-624-6555 704-273-1500
Phillips Recoveries	Pelzer, SC, SED General www.phillipsrecoveriesinc.com		864-947-6861 800-847-6805
First Environmental	Macon, GA Atlanta, GA www.firstenvironmental.com		888-720-1330 478-477-2323 770-322-3559
A & D Environmental and Emergency	High Point, NC Greenville, SC Atlanta, GA Macon, GA www.adenviro.com		800-434-7750 864-234-0055 678-714-8420 478-788-8899
NES Rentals	SED General www.nesrentals.com		800-637-7368
Baker Tanks	SED General www.bakercorp.com		800-225-3712
Rain for Rent	SED General www.rainforrent.com		800-742-7246

Colonial Pipeline Company

OIL SPILL RESPONSE ORGANIZATIONS

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE NUMBERS
Xylem(Godwin Pumps)	Charlotte NC www.godwinpumps.com	Adam Nichols	704-588-4592 704-953-3474 Adam.nichols@xyleminc.com 856-467-3636
Zebra Environmental	High Point, NC www.zebraenviro.com		336-841-5276

Colonial Pipeline Company

PIPELINE REPAIR CONTRACTORS

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE
CECO Pipeline Services	5442 Alder Dr. Houston, TX 77081 www.tryceco. com/pipeline_services	SED Emergency Contact: Matt White GCD Emergency Contact: Shane Hungerford Mike Davis Shane Corcet Luke Hotze	Office: 713-663-1671 832-221-0886 337-496-4198 C: (b) (6) [redacted] W: 281-467-2217 C: (b) (6) [redacted]
E P & S, Inc.	P.O. Box 240 Cleveland, NC 27013	Gary Blythe Carolyn Blythe	W: 704-392-7155 C: (b) (6) [redacted] F: 704-278-1761
Ed Wallace Construction	P.O. Box 612 Paw Creek, NC 28130 www.edwallaceconstruction .com	Office Shane Hinson	W: 704-393-1510 C: (b) (6) [redacted]
J.D. Denson Mowing Contractors, Inc.	4950 NC Hwy 751 Apex, NC 27523	J.D. Denson	W: 919-362-1148 C: (b) (6) [redacted] F: 919-362-1237
JANX Services, Inc	P.O. Box 190 Parma, MI 49269-0190 www.janxndt.com	Steve Flickinger	Emerg: 517-533-0031 W: 517-531-8210 C: (b) (6) [redacted] F: 517-531-3911
L.E. Bell Construction	1226 County Rd. 11 Heflin, AL 36264	Larry Bell (Office) Dan Norton Clif Wakefield James Saxon	W: 800-472-9427 C: (b) (6) [redacted] C: [redacted] C: [redacted]
Superior Land Design LLC	3612 Shepherds Lane Loganville, GA 30052	Patrick Dover	C. 678-441-1062
QSL Plus Radiography (Quality Services Laboratories)	1721 Williams Road Monroe, NC 28110	Office Fax Billy Burton	W: 704-291-2360 F: 704-291-9536 C: (b) (6) [redacted]
Ballard Utility Construction, Inc. Email: ballardutility@charter.net	100 Northwest Drive Anderson, SC 29625	Matt Kelly Terry Ballard	W: 864-231-0359 F: 864-231-6861
Baker Tanks	SED General www.bakercorp.com/		800-225-3712

Colonial Pipeline Company

PIPELINE REPAIR CONTRACTORS

Rain for Rent	SED General www.rainforrent.com		800-742-7246
Xylem(Godwin Pumps)	Charlotte NC www.godwinpumps.com	Adam Nichols	704-588-4592 704-953-3474 Adam.nichols@xyleminc.com 856-467-3636
Zebra Environmental	High Point, NC www.zebraenviro.com		336-841-5276

Colonial Pipeline Company

ENVIRONMENTAL CONTRACTORS

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE
Wetland and Ecological	Woodstock, GA	Rick Whiteside	770-591-9990
Environ (NRDA)	Atlanta, GA	Joe Nicolette	678-388-1665 (office) (b) (6) [redacted] (cell)
Tri-State Bird Rescue & Research	110 Possum Hollow Rd. Newark, DE 19741	Danene Birtell 9am – 5pm 24hr Hotline	Cell: (b) (6) [redacted] 302-737-7241 800-261-0980
The Response Group	13231 Champion Forest Drive Ste. 310 Houston, Tx. 77069	Roy Barrett	281-880-5000 800-651-3942 (24Hr) 281-596-6976 (Fax)
Center for Toxicology & Environmental Health (CTEH)	5120 North Shore Drive North Little Rock, AR 72118	Cory Davis	866-869-2834 (24 HR) 501-801-8500

Colonial Pipeline Company

AERIAL RECONNAISSANCE CONTRACTORS

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE
Georgia			
Augusta Aviation (Fixed Wing)	1775 Highland Ave. Augusta, GA 30904	Steve Gay After Business Hours	706-733-8970 704-289-6868
Helicopters, Inc.	2003 Flightway Dr. Chamblee, GA 30341	Tom Wagner	W: 770-454-6958 C (b) (6) [redacted]
Helicopter Express.com	2001 Flightway Drive Chamblee, GA 30269	Gary Dalton	C: (b) (6) [redacted] gary@helicopterexpress.com
RotorWorks, LLC Email: info@rotorworksllc.com	165 Commodore Path Hiram, GA 30141	Mark Caffrey John Indridason	C: (b) (6) [redacted] 769 24HR C: [redacted] 24HR
Harrison Construction (Fixed Wing)	5975 Columbus Road Macon, GA 31206	Danny Harrison Danny Harrison Jr	C (b) (6) [redacted] W: 478-476-8892 C (b) (6) [redacted]
South Carolina			
NC Helicopters Inc./ Queen City Helicopter Corp.	125 Fraley Road Gastonia, NC 28052	Rocco Novelli	704-629-4677 cel (b) (6) [redacted]
Tennessee			
Chattanooga Aircraft Charter (Fixed Wing)	1824 E. Crabtree Rd. Hixson, TN 37343	Todd Pettibone	W: 423-236-5151 C (b) (6) [redacted]
Great Smoky Mountain Helicopter, Inc.	1101 Gov. Winnfield Dunn Pkwy. Sevierville, TN 37876	Jim Garst	C: (b) (6) [redacted]
Helistar Aviation	110 Tune Airport Dr. Nashville, TN 37209	Joel Boyers Adelynn Chapman	615-350-1122 C: (b) [redacted] (b) (6) [redacted]
North Carolina			
Helivision, LL	9000 Aviation Blvd, Suite 219 Concord, NC 28027		O: 704-792-1807 F: 704-792-1907
NC Helicopters Inc./ Queen City Helicopter Corp.	125 Fraley Road Gastonia, NC 28052	Rocco Novelli	704-629-4677 cell (b) (6) [redacted]
US Helicopter Services	Hwy 74W Marshville, NC	Greg Parsons	W: 704-233-4254 C: (b) (6) [redacted]
Alabama			
Roto Wing, Inc.	5885 Newfound Road Mt. Olive, AL 35117	Peter Basler Patrick Dent Donnie Click	W: 205-631-6531 C: (b) (6) [redacted] C: (b) (6) [redacted]
Over The Mountain Aviation (Fixed Wing) Shelby County Airport	265 A Weathervane Rd. Calera, AL 35040	Barry Franks	W:205-670-6359
Colonial Patrol Plane Pilots	Calera, AL	Rick Daniels	C (b) (6) [redacted]

Colonial Pipeline Company

AERIAL RECONNAISSANCE CONTRACTORS

Shelby County Airport			
Wesson Aviation	12 Heatherwood Ln Oxford, AL 36203	William Wesson	W: 256-473-7221
Express Helicopters	4724 65h Place Birmingham, AL 35212	Brian Coshatt	W: 205-591-5456 C: (b) (6) [redacted]

Colonial Pipeline Company

OTHER EMERGENCY RESPONSE EQUIPMENT SUPPLIERS

COMPANY NAME	ADDRESS	CONTACT	TELEPHONE
A & D Environmental	High Point, NC		**336-434-7750** 800-434-7750
Allied Energy Corporation (AEC)	Birmingham, AL	www.alliedenergycorp.com	**205-278-6162**
APC	Spartanburg, SC		864-573-9301
Aqua Terra Recycling and Treatment	Oxford, GA	www.aquaterrarecycling.com/vacuum-trucks	678-625-4025
Belue Trucking	Spartanburg, SC		**864-576-1660**
City of Pelham Fire Department	P.O. Box 1419 Pelham, AL 35124	Ricky King	**205-966-3477**
Cumberland /Harnett	Spring Lake, NC		**910-497-7183**
DuPree Transport	Nashville, TN		800-865-7268
Eagle Transport	Belton/Spartanburg, SC Greensboro, NC Selma, NC Charlotte, NC	www.eagletransportcorp.com	864-585-6336 336-294-8800 919-965-4191 704-399-2597
Florida Rock & Tank	2766 Woodwin Dr. Doraville, GA 30360 Chattanooga/Ringgold Knoxville Augusta, GA Macon, GA Albany, GA Birmingham, AL Bainbridge, GA	www.floridarockandtanklines.com	770-457-4457 423-305-0602 865-588-4443 706-793-6111 478-788-5113 229-883-0881 334-834-5453 229-246-4000
Holston Environmental Services (Tankers Only)	Chattanooga, TN NC, SC,	www.holstonenv.com	**800-222-4530**

Colonial Pipeline Company

OTHER EMERGENCY RESPONSE EQUIPMENT SUPPLIERS

Kenan Transport	Birmingham, AL Doraville, GA Spartanburg, SC Greensboro, NC Wilmington, NC Selma, NC Charlotte, NC	www.thekag.com	205-945-6760 800-343-8814 770-300-0177 C: (b) (6) [redacted] 864-583-6301 877-493-6638 (24 hrs) 336-299-2386 910-762-3377 919-965-8116 800-343-8816 704-399-1596
L.E. Bell Construction	1226 County Road 11 Heflin, AL 36264		256-253-2676
Penn Tank	Knoxville, TN Atlanta, GA	www.penntanklines.com	800-910-1017 888-447-7107
Pope Transport (Tankers Only)	Charlotte area Selma, NC		800-228-6981 800-722-2107
Super Highway Oil Co. (Tankers Only)	Greenville, SC Taylors, SC		864-244-1281 864-244-0411
The City of Greensboro Fire Department	1514 North Church Street Greensboro, NC 27405	Alex Gossett	336-430-6042
Thomkins Petroleum Transport	1049 S. Indian Creek Drive Stone Mtn., GA 30083		404-294-1712
Williams Fire & Hazard Control Inc.	P.O. Box 1359 Mauriceville, TX 77626	24 Hour Emergency	409-727-2347 or 281-999-0276

Colonial Pipeline Company

VENDOR SUPPORT & SUPPLIES

Alabama		
COMPANY	ADDRESS	TELEPHONE
Absorbents, Boom & Diapers		
New Pig	One Pork Ave Tipton, PA 16684-0304	855-493-4647
Equipment Rental & Pipe Supply Companies		
Sunbelt Pump & Power	30008 Pinson Valley Parkway Birmingham, AL 35217	205-251-2563
United Rental	1214 Hamric Dr. West Oxford, AL 36203	256-831-0140
Consolidated Pipe Co.	1205 Hilltop Parkway Birmingham, AL 35201	205-323-7261
Sunbelt Rental	5100 Old Greensboro Road Tuscaloosa, AL 35405	205-758-2749
Sanitation Supplies		
Trash Taxi	656 Stuart Ln Pelham, AL 35124	205-419-4005
AAA Solutions Inc.	3685 Industrial Parkway Birmingham, AL 35217	205-274-7368
Budget Janitorial Supply	90 Pardue Rd Pelham, AL 35124	205-663-1822
Safety, Security, & PPE		
Grainger Industrial Supply	185 W. Oxmoor Rd. Birmingham, AL 35209-6331	205-942-6741
Blasing Fire & Water, Inc.	3025 Wilson St. Pelham, AL 35124	205-664-3473
Industrial Fire & Safety	1229 1st Ave S. Birmingham, AL 35233	205-591-9660
Lowe's Home Improvement		800-445-6937
Home Depot		800-home-depot
Hotels		
Sheraton Capstone Inn (Conference Capacity – 4200 SF)	320 Bryant Drive Tuscaloosa, AL 35401	205-752-3200
Hilton Garden Inn (Conference Capacity – 2500 SF)	4000 Grand Ave Birmingham, AL 35226	205-916-7677
Hilton Garden Inn Tuscaloosa (Conference Capacity – 1100 SF)	800 Hollywood Blvd. Tuscaloosa, AL 35405	205-722-0360
Renaissance Ross Bridge (Conference Capacity - 21000 SF)	4520 Galleria Boulevard Hoover, AL 35244	205-380-3300
Hampton Inn Pell City (Conference Capacity – 648 SF)	220 Vaughn Lane Pell City, AL 35125	205-814-3000
Hampton Inn Birmingham (Conference Capacity – 720 SF)	232 Cahaba Valley Road Pelham, AL 35124	205-313-9500

Colonial Pipeline Company

VENDOR SUPPORT & SUPPLIES

Tennessee		
COMPANY	ADDRESS	TELEPHONE
Absorbents, Boom & Diapers		
New Pig	One Pork Ave Tipton, PA 16684-0304	855-493-4647
Equipment Rental & Pipe Supply Companies		
Art Pancake's Rent All	5025 Nolensville Rd. Nashville, TN 37211	615-832-1234
Blinker-lite Safety, Inc.	327 54th Ave. N. Nashville, TN 37209	615-783-0700
Ferrar Brothers Ace Hardware	1209 NW Broad Street Murfreesboro, TN 37219	615-893-6118
Sunbelt Rentals	1805 Lebanon Pike Nashville, TN 37210 2370 Southgate Blvd Murfreesboro, TN 37125	615-248-6060 615-849-4000
Swope Equipment & Supply Co., Inc.	3000 Alton Park Blvd Chattanooga, TN 37410	423-266-5661
Sanitation Supplies		
Republic Services	1018 E. 38th Street Chattanooga, TN 37407	432-867-4650
The Bolles Company, Inc.	1850 W. Polymer Dr. Chattanooga, TN 37421	453-694-7975
Pit Stop Portable	1516 East Main Street Chattanooga, TN 37404	423-694-3232
Scott Portable Toilet	PO Box 1597 McMinnville, TN 37133	615-893-6929
Waste Management	1428 Antioch Pike Antioch, TN 37013	615-831-9600
Safety, Security, & PPE		
Hertz	1320 Murfreesboro Pike Nashville, TN 37217	615-365-8868
Industrial Fire & Safety	608 Ash Street Nashville, TN 37203	615-244-1465
Hagemeyer North America	6961 Karns Crossing Lane Knoxville, TN 37931	800-482-5538 865-524-1206
Grainger Industrial Supply	902 Creekside Rd. Chattanooga, TN 37406	205-942-6741

Colonial Pipeline Company

VENDOR SUPPORT & SUPPLIES

Hotels		
The Smokehouse Lodge(Conference Capacity – 3456 SF)	850 West Main Street Monteagle, TN 37356	800-489-8091
Doubletree Chattanooga (Conference Capacity – 4730 SF)	407 Chestnut Street Chattanooga, TN 37402	423-756-5150
Doubletree Nashville Downtown (Conference Capacity – 7000 SF)	315 4th Avenue North Nashville, TN 37219	615-244-8200
The Chattanoogan Hotel (Conference Capacity – 7752 SF)	1201 Broad Street Chattanooga, TN 37402	423-756-3400
Doubletree Oak Ridge (Knoxville) Conference Capacity – 3192 SF)	215 S Illinois Ave Oak Ridge, TN 37830	865-481-2468
Georgia		
COMPANY	**ADDRESS**	**TELEPHONE**
Absorbents, Boom & Diapers		
MSA Safety Equipment	RIDC Industrial Park, Pittsburgh, PA	800-672-2222
Hagemeyer Cameron & Barkley	1600 Waterville Road Macon, GA. 31206	478-743-8657
Hazard Control Technologies	150 Walter Way Fayetteville, GA. 30214	770-719-5112 770-318-1805
Waltham Oil Company	2520 Allen Road Macon, GA	478-781-1234
Equipment Rental & Pipe Supply Companies		
A & S Equipment Rental	1300 Dothan Rd. Bainbridge, GA	229-246-8390 800-305-5866
ABLE Tool Rental	3360 Fairburn Rd. Douglasville, GA	770-949-1932
Dependo Rent All	1999 Lafayette Rd Ft. Oglethorpe, GA	706-866-6845
Neff Rental	Athens, GA	706-543-1328
Ready Rent All	4400 Snapfinger Woods Dr. Decatur, GA	770-987-5500
Rental Concept	3310 Pio Nona Ave. Macon, GA	478-781-0872
Sunbelt Rentals	5834 Fairburn Rd Douglasville, GA	800-508-4761
Crane Rental		
Erycson Crane & Rigging	Augusta, GA	706-771-6580
Heaton Erecting, Inc.	Forest Park, GA	404-363-3130 www.heatonerecting.com

Colonial Pipeline Company

VENDOR SUPPORT & SUPPLIES

Sanitation Supplies		
A Peach State Portables	Athens, GA	706-549-1234
Johnny on the Spot	4711 Joe Frank Harris Parkway Adairsville, GA 30103	800-696-7700
Peak's	Climax, GA	229-246-2142
Phillips & Son Portable Toilets	Hwy 74 Forsyth, GA	478-994-5475
Republic Services	3405 Bankhead Hwy Atlanta, GA 30318	404-792-2660
Southland Waste Systems	2201 Trade Drive Macon, GA	478-746-7230
Safety, Security, & PPE		
Lowe's Home Improvement		800-445-6937
Home Depot		800-home-depot
Hotels		
Atlanta Marriott Marquis (Conference Capacity - 4,600)	265 Peachtree Center Avenue Atlanta, GA 30303	404-521-0000
Best Western (Conference Capacity - 50)	2400 Riverside Drive Macon, GA	478-743-6311
Charter House Inn (Conference Capacity - 225)	1401 Tallahassee Hwy Bainbridge, GA 39819	229-246-8550
Hampton Inn & Suites (Conference Capacity - 45)	6875 Battlefield Parkway Ringgold, GA 30736	706-935-4800
Holiday Inn - Express (Conference Capacity - 70)	3741 Tramore Pointe (East-West Connector) Austell, GA 30106	770-349-8000
The Westin Peachtree Plaza (Conference Capacity - 2,500)	210 Peachtree Street Atlanta, GA 30303	404-659-1400
South Carolina		
COMPANY	**ADDRESS**	**TELEPHONE**
Absorbents, Boom & Diapers		
MSA Safety Equipment	1000 Cranberry Wood Dr. Cranberry Township, PA 16066	800-672-2222
Crane Rental		
Blanton's Crane Rental	Gaffney, SC	864-489-1136
Campbell Crane Services	Anderson, SC	864-226-7878
Green T. Services	Anderson, SC	864-226-7878
R J Shirley	Spartanburg, SC	864-295-4550
Equipment Rental & Pipe Supply Companies		
Campbell Crane Services	16 Oakvale Rd Greenville, SC	864-226-7878
General Equipment Supply	Simpsonville, SC	864-243-5452
Greenwood Supply Company	Greenwood, SC	864-229-2501
Hertz Equipment Rental	Greenville, SC	800-828-6735
M.J. Home Supply	Spartanburg, SC	864-579-2084
Rhino Equipment	Simpsonville, SC	864-967-2554 864-217-5973
RSC	Greenville, SC	864-288-2533

Colonial Pipeline Company
VENDOR SUPPORT & SUPPLIES

Sunbelt Rentals	Greer, SC Anderson SC	864-877-7330 864-224-8881
United Rentals	Anderson, SC Greenville, SC Spartanburg, SC	864-226-1200 864-288-1211 864-591-1211
Sanitation Supplies		
A Superior Sanitation Service	Simpsonville, SC	864-228-0787
Higdon's Portable toilets	Due West, SC 29639	864-922-2740 800-922-2740
Higdon's Portable toilets	Simpsonville, SC	800-922-2740
Jiffy John		888-595-4712
Waste Management of SC	Spartanburg, SC Anderson, SC	864-949-2600 864-225-6211
Safety, Security, & PPE		
TSK Fire & Safety Equipment	Spartanburg, SC	800-864-0926
Home Depot	Spartanburg, SC Anderson, SC	864-579-0382 864-964-0820
Lowe's Home Improvement	Spartanburg, SC Anderson, SC Greenville, SC	864-596-4743 864-964-9228 864-297-9542
Pinkerton Security Services	Greenville, SC	864-242-0464
Hotels		
Comfort Suites (Conference Capacity - 66)	154 Candlenet Lane Spartanburg, SC 29316	864-814-2001
Embassy Suites (Conference Capacity - 1,500)	670 Verdae Blvd. Greenville, SC 29607	864-676-9090
Holiday Inn - Express (Conference Capacity - 40)	107 Interstate Blvd. Anderson, SC 29621	864-226-3312
Hilton Garden Inn (Conference Capacity - 250)	108 Carolina Point parkway Greenville, SC 29605	864-284-0111
North Carolina		
COMPANY	**ADDRESS**	**TELEPHONE**
Absorbents, Boom & Diapers		
MSA Safety Equipment	1000 Cranberry Wood Dr. Cranberry Township, PA 16066	800-672-2222
Crane Rental		
Guy M Turner	Greensboro, NC	336-294-4660
Charlotte Crane Service	4520 Reagan Dr. Charlotte, NC 28206	704-597-6380 704-283-4411
Equipment Rental & Pipe Supply Companies		
Stay Alert Safety Service Inc.	High Point, NC	336-889-7283
Consolidated Pipe & Supply	Greensboro, NC	336-294-6577
Gaston Rentals	200 E. Garrison Blvd. Gastonia, NC	704-867-7231

Colonial Pipeline Company

VENDOR SUPPORT & SUPPLIES

Hertz Equipment Rental	Greensboro, NC Raleigh, NC	336-275-0775 919-834-2527
	4429 N. I-85 Service Rd. Charlotte, NC 28269	704-598-0241
Murray Supply Col	301 W. 32nd St. Charlotte, NC 28206	704-334-4651
Pump & Tank Shop	Greensboro, NC	336-292-3970
Pump, Pipe, Sales & Service	Greensboro, NC	336-668-3402
Red Man Pipe & Supply	10230 Rodney St. Pineville, NC	704-889-7211
United Rentals	Greensboro, NC Charlotte, NC Concord, NC Mooresville, NC	336-292-6252 704-522-8338 704-799-9925 704-799-2422
Sunbelt Rentals	Charlotte, NC Concord, NC Greensboro, NC Mooresville, NC	704-599-5967 704-795-2640 336-547-9300 704-660-9669
Thomas Equipment	3435 South Blvd. Charlotte NC	704-523-5503
Sanitation Supplies		
A-1 Arrow Disposal, Inc.	North Carolina	704-467-7744
A-Sani-Can Services	NC Area	800-521-8941
Carolina Container Service	Charlotte Area	704-252-7100
Porta Jon of Piedmont	Charlotte Area	704-375-8862
Comer Sanitary Service	Lexington, NC	800-222-3868
Metro Waste	Charlotte Area	704-372-3901
Porta-Jon	212 Bulb Avenue Gastonia, NC 28052 Charlotte, NC	704-865-2515 704-375-8988
Triad Port-a-John	Greensboro, NC	336-292-7615
Safety, Security, & PPE		
Premier Protection Services	Greensboro, NC	336-855-8480
Wackenhut Corporation	Greensboro, NC	336-854-3330
Zee Medical Supply	Greensboro, NC	336-668-7714
Lowe's Home Improvement		800-445-6937
Home Depot		800-home-depot
Hotels		
Ashford Suites (Conference Capacity - 85)	3901 Sedgebrook Street High Point, NC	336-812-8787
Clarion (Conference Capacity - 371)	415 South Swing Road Greensboro, NC	336-299-3474

Colonial Pipeline Company
VENDOR SUPPORT & SUPPLIES

Embassy Suites - Airport (Conference Capacity - 800)	204 Centreport Drive Greensboro, NC 27409	336-668-4535
Virginia		
COMPANY	**ADDRESS**	**TELEPHONE**
Absorbents, Boom & Diapers		
MSA Safety Equipment	1000 Cranberry Wood Dr. Cranberry Township, PA 16066	800-672-2222
Equipment Rental & Pipe Supply Companies		
Crane Rental		
Central VA Maintenance	Buckingham, VA	804-969-1779
Sanitation Supplies		
Garth Septic Service	Orange, VA	540-672-3361
Mo John's Portable Toilets	1936 Cartersville Road Cartersville, VA 23027	800-440-6116
Safety, Security, & PPE		
Lowe's Home Improvement		800-445-6937
Home Depot		800-home-depot
Hotels		
Doubletree Roanoke Conference (Conference Capacity -250)	110 Shenandoah Ave. Roanoke, VA 24106	540-985-5900
Embassy Suites Richmond (Conference Capacity - 250)	2925 Emerywood Parkway Richmond, VA 23294	804-672-8585
Best Western Crossroads Inn (Conference Capacity - 200)	135 Wood Ridge Terrace Zion Crossroads VA, 22942	540-832-1700

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Presented below is a list of airports that have the greatest potential for emergency response purposes. This listing does not include all airports into which or from which the corporate aircraft can operate. Those listed have good instrument approaches that should enable their use during inclement weather and at night. The most restrictive limitation will be the availability of ground transportation. Most car rental companies are only open when scheduled commercial aircraft are due to arrive or depart. The best method of getting a rental car is to check with the Fixed Base Operator (FBO) listed for each airport.

ATLANTA AREA CHARTER SERVICES

Epps Aviation - Peachtree DeKalb Airport – 770-458-9851 –http://www.eppsaviation.com
Flight Charter: 678-539-6313 – www.hillaircraft.com
Flightworks – McCollum Field, Kennesaw – 800-255-1971 or 770-427-5660 – www.flightworks.com
Hill Aircraft & Leasing Corp – Fulton Co - Charlie Brown Airport - 404-691-3330 – www.hillaircraft.com
L. E. Bell – Heflin, AL - 800 472-9427 – www.admin@le-bell.net
Helicopter Express – Dekalb Peachtree Airport (PDK) 770-963-6889 www.helicopterexpress.com

MAINLINE AIRPORTS (West to East)

Houston, Texas
Hobby Airport - KHOU
Million Air - 713-640-4000
Hours of Operation - 24 hours
Runway 7,600 X 150 - ILS Approach

Rental Cars Available – Avis	713-649-5819
Enterprise	713-645-7222
Hertz (off-site)	713-948-5300
National	713-641-0533

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Beaumont, Texas
Jefferson County Airport -KBPT
Jefferson County – 409-719-4900 Hours of Operation - 24 hours
Hours of Operation - 24 hours
Runway 6,750 X 150 - ILS Approach

Rental Cars Available - Avis	409-722-0209
Hertz	409-727-2137
National	409-722-6111
Budget	409-727-2588

Lake Charles, Louisiana
Lake Charles Regional Airport -K LCH
Vision Aviation - 337-478-7722
Hours of Operation - 0530-2200 - after hours call 337-478-7772
Runway 6,500 X 150 - ILS Approach

Rental Cars Available - Avis	337-477-9374
Hertz	337-477-0616
National	337-478-0083
Budget	337-477-7991
Enterprise	337-479-2447

Lafayette, Louisiana
Lafayette Regional Airport - KLFT
Hours of Operation - 24 hours 337-266-4400
Runway 8,040 X 150 - ILS Approach

Rental Cars Available - Avis	337-234-3205
Budget	337-233-8888
Hertz	337-233-7010
National	337-234-3170
Enterprise	337-232-5493

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Baton Rouge, Louisiana
Metropolitan Airport - KBTR
Louisiana Aircraft - 225-356-1401
Hours of Operation – 24 hours
5625 Runway 7,000 X 150 - ILS Approach

Rental Cars Available - Avis	225-355-4721
Budget	225-355-0312
Hertz	225-357-2867
National	225-355-5651
Enterprise	225-355-5157

Hattiesburg, Mississippi
Hattiesburg-Laurel Airport -K PIB
US Aviation - 601-554-0951
Hours of Operation - 0500-2030 – after hours call 601-583-9470 or 601-544-6926
Runway 6,502 X 150 - ILS Approach

Rental Cars Available – Enterprise	601-264-7184

Meridian, Mississippi
Key Field - KMEI
Meridian Aviation - 601-693-7282
Hours of Operation - 0500-2300 – no after-hours number
Runway 10,003 X 150 - ILS Approach

Rental Cars Available - Avis	601-483-7144
Hertz	601-485-4774

Tuscaloosa, Alabama
Municipal Airport - KTCL
Bama Air – 800-937-1716
Hours of Operation – 0600-2200
Runway 6,499 X 150 - ILS Approach

Rental Cars Available - Avis	205-345-3333
Enterprise	205-349-4446
U-Save	205-553-5947

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Birmingham, Alabama
Birmingham International Airport - KBHM
Atlantic Aviation West Ramp – 205-849-5520
Hours of Operation - 24 hours
Runway 11,998 X 150 - ILS Approach

Rental Cars Available - Avis	205-592-8901
Enterprise	205-591-1927
National	205-599-7100
Budget	205-322-3546

Anniston, Alabama
Metropolitan Airport - KANB
Anniston Executive Aviation - 256-831-4410
Hours of Operation - 0700-1800 M-F – 0800 – 1700 Sat, Sun – after hours call 256-831-6147 or 7297, 256-831-4410 (on-call person) and Scott Wallace cel (b) (6) [redacted]
Runway 7,000 X 150 - ILS Approach

Rental Cars Available - Avis	256-238-1261
Enterprise	256-832-5455
Hertz	256-831-6479
Rental Express	256-831-2917

Atlanta, Georgia
Dekalb-Peachtree Airport - KPDK
Mercury Air Center - 770-451-7676
Hours of Operation - 24 hours
Runway 6,000 X 100 - ILS Approach

Atlanta, Georgia
Hartsfield-Jackson International Airport – ATL
800-8967-1910 www.atlanta-airport.com

Rental Cars Available - Auto-Save thru FBO	
Avis	770-454-5000
Enterprise	770-452-0010

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Anderson, South Carolina
Anderson Regional Airport - KAND
Anderson Aviation - 864-964-5656
Hours of Operation – 0730 am -1930 pm M-F, 900 am – 600 pm Sat. & Sun. – after hours call 864-260-4163 http://www.andersoncountysc.org/web/Transportation_01.asp
24 – Hours cell phone 864-260-4163
Runway 6,000 X 150 – ILS, VOR, GPS Approach

Rental Cars Available - Budget	864-231-6226
Enterprise	864-222-2775

Greenville, South Carolina (more than one listed)
Donaldson Center Airport – KGYH - 864-277-8184
Hours of Operation - 0600-1900 – 24 Hour on call
Runway 8,000 X 150 - ILS Approach
Air Charter Express –Craig Carter-Cell phone (b) (6) [redacted]

Rental Cars Available - Enterprise	864-297-0089

Greenville, South Carolina (more than one listed)
Greenville Downtown Airport – KGMU – 864-242-4777
Greenville Jet Center – 864-232-7100
Venture Aviation – 24-hour phone 864-270-3812
Hours of Operation - 0500-2200 M-F; 0600-2200 Sat; 0600-2200 Sun – no after-hours number
Runway 5,393 X 150 - ILS Approach

Rental Cars Available - Enterprise	864-233-8182

Greer, South Carolina (more than one listed)
Greenville-Spartanburg Airport - KGSP
Stevens Aviation - 864-879-6155
Hours of Operation - 24 hours
Runway 11,001 X 150 – ILS, GPS, NDB Approach

Rental Cars Available - Avis	864-877-6456
Budget	864-879-2134
Hertz	864-879-0181

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Charlotte, North Carolina
Charlotte Douglas International Airport - KCLT
Wilson Air Center - 704-359-0440
Hours of Operation - 24 hours
Runway 10,000 X 150 - ILS Approach

Rental Cars Available - Avis	800-831-2847
Enterprise	800-325-8007
Hertz	800-654-3131

Concord, North Carolina
Concord Regional Airport - KJQF
Concord Regional Airport - 704-920-5900
Hours of Operation - 24 hours
Runway 7,400 X 100 - ILS Approach Rental

Rental Cars Available – Avis	704-795-2880

Greensboro, North Carolina
Piedmont Triad International Airport – KGSO
Landmark Aviation - 800-334-2001
Hours of Operation - 24 hours
Runway 10,000 X 150 - ILS Approach

Rental Cars Available - Avis	336-665-5700
Budget	336-665-5882
Hertz	336-668-7961

Danville, Virginia
Danville Regional Airport - KDAN
General Aviation - 434-793-7033
Hours of Operation – 0500-2400 – no after-hours number
Runway 6,500 X 150 - ILS Approach

Rental Cars – Only through FBO

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Lynchburg, Virginia
Regional/Glenn Field - KLYH
Virginia Aviation - 434-237-8420
Hours of Operation - 0500-2200 – After hours number 434-944-3056
Runway 5,800 X 150 - ILS Approach

Rental Cars Available - Avis	434-239-3622
Budget	434-237-1444
Hertz	434-237-6284
Enterprise	434-239-5785

Richmond, Virginia
Richmond International Airport - KRIC
Million Air - 800-962-5262/804-222-3700
Hours of Operation - 24 hours
Runway 9,000 X 150 - ILS Approach

Rental Cars Available - Avis	804-222-7416
Hertz	804-222-7228
National	804-222-7477
Enterprise	804-222-0865

Charlottesville, Virginia
Charlottesville-Albemarle Airport - KCHO
Landmark Aviation - Corporate Jets - 434-978-1474
Hours of Operation – 24 Hours
Runway 6,000 X 150 - ILS Approach

Rental Cars Available - Avis	434-973-6000
Airport Auto Rental	434-974-6122
National	434-974-4664
Hertz	434-297-4288

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Manassas, Virginia
Manassas Regional Airport - KHEF
APP Jetcenter – 866-459-5387
Hours of Operation- 0630-2230 - no afterhours number
Runway 6,200 X 100 - ILS Approach

Rental Cars - Dudley Martin Chevrolet	703-368-2111
Enterprise	703-333-9696

Washington, D. C.
Dulles International Airport - KIAD
Landmark Aviation - 800-926-0150
Hours of Operation - 24 hours
Runway 11,500 X 150 - ILS Approach

Rental Cars Available - Avis	703-661-3504
Budget	703-437-9373
Enterprise	703-478-2300
National	703-471-5278

Frederick, Maryland
Frederick Municipal Airport - KFDK
Landmark Aviation - 301-662-8156
Hours of Operation - 0700-2100 - no afterhours number
Runway 5,200 X 100 - ILS Approach

Rental Cars Available - Budget	301-663-8255
Hertz	301-662-2626
Enterprise	301-695-8822
Westminister, Maryland	

Carroll County Regional Airport - KDMW
Skytech – 410-876-0353
Hours of Operation - 0700-2000 - after hours call 410-876-9885
Runway 5,100 X 100 - VOR Approach

Rental Cars Available - Budget	410-848-8011

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Baltimore, Maryland
Baltimore-Washington International Airport - KBWI
Signature Flight Support - 410-859-8393
Hours of Operation - 24 hours
Runway 10,502 X 200 - ILS Approach

Rental Cars Available - Avis	410-859-1680
Budget	410-859-1050
Hertz	410-850-7400
National	410-859-8860

Baltimore, Maryland
Martin State Airport - KMTN
Martin State Airport - 410-682-8810
Hours of Operation - 0600-2300 - After hours number -410-682-8800 Runway 6,997 x 180

Rental Cars Available - Budget	410-282-4397
Enterprise	410-682-6474

Wilmington, Delaware
New Castle County Airport - KILG
Dawn Aeronautics - 302-328-9695
Hours of Operation - 0700-1900 - after hours answering service
Runway 7,100 X 150 - ILS Approach

Rental Cars Available - Avis	302-322-2092
Budget	302-764-3300
Enterprise	302-323-0850

Philadelphia, Pennsylvania
Philadelphia International Airport - KPHL
Atlantic Aviation - 215-492-2970
Hours of Operation - 24 hours
Runway 10,500 X 200 - ILS Approach

Rental Cars Available - Avis	215-492-6523
Budget	215-492-9447
Hertz	215-492-2925
National	215-492-2750

Trenton, New Jersey
Mercer County Airport - KTTN
Ronson Aviation - 609-771-9500
Hours of Operation - 24 hours
Runway 6,006 X 150 - ILS Approach
Rental Cars Available - Hertz at FBO 0700-2230 M-F; 0700-2130 S-S

Newark, New Jersey
Newark International Airport - KEWR
Signature Flight Support - 973-624-1660
Hours of Operation - 24 hours
Runway 9,300 X 150 - ILS Approach

Rental Cars Available - Avis	973-961-4300
Budget	973-961-2990
Enterprise	973-242-3400
Hertz	972-621-2000

STUBLINE AIRPORTS (West to East)

TENNESSEE LINES

Rome, Georgia
Richard B. Russell Airport - KRMG
Russell Airport - 706-295-7835
Hours of Operation - 0700-2000 – after hours call 911
Runway 6,006 X 150 - LOC/DME Approach

Rental Cars Available - Enterprise	706-290-1093
Automax	706-291-0600

Chattanooga, Tennessee
Lovell Field - KCHA
Wilson Air Center – 423-855-2299
Hours of Operation – 24 Hours
Runway 7,400 X 150 - ILS Approach

Rental Cars Available - Avis	423-855-2232
Alamo	888-826-6893
Hertz	423-855-8131

Nashville, Tennessee
Nashville International Airport - KBNA
Atlantic Aviation 615-360-8109
Hours of Operation – 24 Hours
Runway 11,030 X 150 - ILS Approach

Rental Cars Available - Avis	615-361-1212
Budget	615-366-0822
Hertz	615-361-3131
Thrifty	615-361-6050

Knoxville, Tennessee
McGhee Tyson Airport - KTYS
TAC Air 865-970-9000
Hours of Operation – 24 Hours
Runway 8,997 X 150 - ILS Approach

Rental Cars Available - Avis	865-970-2985
Budget	865-342-3220
Hertz	865-970-3010
National	865-970-2993
Enterprise	865-342-1650

BAINBRIDGE LINE

Macon, Georgia
Middle Georgia Regional Airport – KMCN
Lowe Aviation – 478-788-3491
Hours of Operation – 0500-220 M-F; 0600-2200 S-S – afterhours call Macon FSSK
Runway 6,500 X 150 - ILS Approach

Rental Cars Available - Avis	478-788-3840
Hertz	478-788-3600
National	

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Americus, Georgia
Souther Field - KACJ
Souther Field Aviation - 229-924-2813
Hours of Operation - 0800-Dusk - Varies
After hours call manager 229-928-2813
Runway 5,000 X 100 - LOC Approach

Rental Cars Available - Enterprise	229-931-6508
RDR	229-924-6330

Albany, Georgia
Southwest Georgia Regional Airport - KABY
Eagles of America -229-434-8787
Hours of Operation - 0530-2200
Runway 6,600 X 150 - ILS Approach

Rental Cars Available - Avis	229-435-2404
Hertz	229-235-1751

Bainbridge, Georgia
Decatur County Industrial Airport - KBGE
Decatur Co Aviation - 229-248-3004
Hours of Operation - 0700-1900 M-S
Runway 5,500 X 100 - VOR Approach

Rental Cars Available - Enterprise	229-248-0448

AUGUSTA LINE

Augusta, Georgia
Bush Field - KAGS
Bush Field Aviation Services - 706-798-2656
Hours of Operation - 24 hours
Runway 8,000 X 150 - ILS Approach

Rental Cars Available - Avis	706-798-1383
Budget	706-790-6902
Hertz	706-798-3970
National	706-798-5835

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

SELMA LINE

Raleigh-Durham, North Carolina
Raleigh-Durham International Airport - KRDU
TAC Air - 919-840-2200
Hours of Operation - 24 hours
Runway 10,000 X 150 - ILS Approach

Rental Cars Available - Avis	919-840-4750
Budget	919-840-4775
National	919-840-4350
Hertz	919-840-4875

Fayetteville, North Carolina
Grannis Field - KFAY
Landmark Aviation – 910-321-7540
Hours of Operation - 0600-0000 - no afterhours number
Runway 7,710 X 150 - ILS Approach

Rental Cars Available - Avis	910-484-7985
Budget	910-484-1483
Enterprise	910-484-2888
National	910-485-2133

Smithfield, North Carolina
Johnston County Airport - KJNX
Johnston County Airport - 919-934-0992
Hours of Operation - 0700-1900 - after hours call 919-553-7025 or 919-203-8103 Runway
5,500 X 100 - LOC/DME Approach

Rental Cars Available - Pipen Mtrs	919-934-2183

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

ROANOKE LINE

Lynchburg, Virginia
Regional/Glenn Field - KLYH
Virginia Aviation – 434-237-8420
Hours of Operation – 0500-2359 – after hours call 804-239-3089 or 804-384-5681
Runway 7,100 X 150 - ILS Approach

Rental Cars Available - Avis	434-239-3622
Budget	434-237-1444
Enterprise	540-563-8055
Hertz	434-237-6284

Roanoke, Virginia
Regional Airport - KROA
Landmark Aviation - 540-563-4401
Hours of Operation – Continuous
Runway 6,800 X 150 - ILS Approach

Rental Cars Available - Avis	540-366-2436
Budget	540-362-1654
Hertz	540-366-3421
National	540-563-5050

NORFOLK LINE

Richmond, Virginia
Richmond International Airport - KRIC
Million Air - 800-222-3700
Hours of Operation – Continuous
Runway 9,000 X 150 - ILS Approach

Rental Cars Available - Avis	804-222-7416
Budget	804-222-2491
Hertz	804-222-7228
Thrifty	877-283-0898
Dollar	804-222-9416
Enterprise	804-222-0865
National	804-222-7477

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Newport News, Virginia
Williamsburg International Airport - KPHF
Rick Aviation – 757-874-6415
Hours of Operation - Continuous
Runway 8,000 X 150 - ILS Approach

Rental Cars Available - Avis	800-831-2847
Thrifty	800-847-4389

Norfolk, Virginia
Norfolk International Airport - KORF
Landmark Aviation – 800-486-4041
Hours of Operation - Continuous
Runway 9,000 X 150 - ILS Approach

Rental Cars Available - Avis	800-831-2847
Thrifty	757-855-5900
National	757-855-2037
Hertz	757-857-1261

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Apex		
SHIPPER	**ADDRESS**	**TELEPHONE**
Motiva Enterprises	2232 Ten-Ten Rd Apex, NC 27539	**Superintendent: Otto Muha** Office: 919-387-0484 Apex: 919-362-8341 Cell: (b) (6) [redacted] Fax: 919-362-4013
Alternate: Jason Brown		Cell: (b) (6) [redacted]
Atlanta Junction		
SHIPPER	**ADDRESS**	**TELEPHONE**
Marathon-Ashland Petroleum, LLC **Emergency # 24/7: 877-627-5463**	3895 Anderson Farm Rd. Austell, GA 30106	**Manager: David Matthews** Phone: 770-948-8550, x22 Cell: (b) (6) [redacted] Home (b) (6) [redacted] Fax: 770-739-1913 Pam Addison x 28 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Jeff Timberland Cell: (b) (6) [redacted] Home: (b) (6) [redacted]
Airport Group Int'l, Inc. (Cities, N. Cargo, FIS)	Hartsfield Int'l Airport Atlanta, GA	**General Manager: Todd Hayes** Phone: 404-767-1743 Cell: (b) (6) [redacted] **Facility Manager: Joe Patrick** Office: 404-530-2059 Cell: (b) (6) [redacted] **FISCities&North Cargo Fuel Farm** Day Supervisor: Ommary Ragland Cities Office: 404-530-6740 Cell: (b) (6) [redacted] Night Supervisor: Thomas Dudley Cell: (b) (6) [redacted] FIS Office: 404-530-2059 24-hr. Technician: 404-693-5236
Delta Fuel Farm	Hartsfield Int'l Airport 1500 NLVR Dr. Atlanta, GA 30354	**Manager: Tommy Steele** Phone:404-714-7925/7926/7927 Cell: (b) (6) [redacted] Personal Cell: (b) (6) [redacted] Fax: 404-714-9098
Trans-Montaigne Operator: Tommy Storey Cell: (b) (6) [redacted]	2671 Calhoun Hwy, N.E. Rome, GA 30161	**Manager: Stacy Elliott** Phone: 706-295-2521 Cell: (b) (6) [redacted] Manifold: (b) (6) [redacted] Fax: 706-290-0912

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Belton		
SHIPPER	**ADDRESS**	**TELEPHONE**
Southeast Terminals (TransMontaigne)	3450 Jefferson Rd. Athens, GA 30607	**Manager: Mike Casper** Business Phone: 706-543-2254 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 706-549-3775
Marathon-Ashland Petroleum, LLC	14315 Hwy 20, North P.O. Box 488 Belton, SC 29627	**Manager: Dave Edmond** Business Phone: 864-338-7753 x23 After Hours: 864-338-7753 Cell: (b) (6) [redacted] Fax: 864-338-1400
Buckeye Partners	14300 Hwy 20, North Belton, SC 29627	**Manager: George Campbell** Terminal Phone: 864-338-7122 Cell: (b) (6) [redacted] Fax: 864-338-8094
	221 Sweetwater Rd. P.O. Box 6427 N. Augusta, SC 29841	**Manager: Mike Miller** Terminal Phone: 803-279-3630 Business Phone: 803-563-8014 Cell: (b) (6) [redacted]
Kinder-Morgan (KM1)	205 Sweetwater Rd. N. Augusta, SC 29860	**Manager: Mike Spires** Business Phone: 803-279-1661 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 803-279-9046
Kinder Morgan (KM2)	221 Laurel Lakes Drive N. Augusta, SC 29841	**Manager: Jerry Corbin** Business Phone: 803-279-1999 Cell: (b) (6) [redacted] Home: (b) (6) [redacted]
Magellan 1 (WTH) Magellan 2 (MTH)	222 Sweetwater Rd. N. Augusta, SC 29860 217 Sweetwater Rd. N. Augusta, SC 29860	**Manager: Don Schilling** WTH Phone: 803-279-2535 WTH: 803-279-7339 Fax: 803-278-7251 MTH Phone: 803-279-2311 Cell: (b) (6) [redacted] Home: (b) (6) [redacted]
Kinder Morgan	3460 Jefferson Road Athens, GA 30607	**Manager: Stan Smith** Phone: 706-543-3447 Cell: (b) (6) [redacted] Home: (b) (6) [redacted]

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Belton (Continued)		
Plantation Pipeline Company	Belton Terminal 120 Sherrad Rd Belton, SC 29627	**Area Manager: Brian Turner** Office: 704-833-1015 Cell: (b) (6) [redacted] **Operator: Tim Moyer** Cell: (b) (6) [redacted] Terminal: 864-338-8611 Main Office: 800-510-5678 Anderson Pump Sta: 864-225-8120
Charlotte		
SHIPPER	**ADDRESS**	**TELEPHONE**
Magellan Mid-Stream Partners Williams Oil Company (Old Amoco Terminal)	P.O. Box 71 Paw Creek, NC 28130	**Manager: Mark Bowen** Phone: 704-399-6331 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 704-399-7990
Citgo Petroleum	P.O. Box 58 Paw Creek, NC 28130	**Manager: Jim Utke** Phone: 704-392-3236 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 704-392-4676
Trans-Montaigne Oil (Old Hess Terminal)	P.O. Box 61 Paw Creek, NC 28130	**Manager: James Barnett** Phone: 704-399-8378 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 704-399-6256
Marathon-Ashland Oil (see next page)	P.O. Box 86 Paw Creek, NC 28130	**Manager: Terry Swick** Cell: (b) (6) [redacted] Home: (b) (6) [redacted]
Magellan (Southern Facilities)	P.O. Box 97 Paw Creek, NC 28130	**Manager: Mark Bowen** Phone: 704-399-8457 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 704-399-2926
Motiva Enterprises, LLC Both Terminals (North & South) (Old Texaco and old Shell)	P.O. Box 88 Paw Creek, NC 28130	**Manager: John Bates** Phone: 704-399-3301 Cell: (b) (6) [redacted] Fax: 704-394-8988

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Charlotte (Continued)		
Kinder Morgan KM3 (Old CTT Terminals)	7325 Old Mt. Holly Rd. Paw Creek, NC 28214	**Manager: Erwin Gaston** Phone: 704-399-3041 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 704-394-3667
KM2 (old Exxon)	6810 Freedom Dr. Charlotte, NC 28214	Phone: 704-399-5696 Fax: 704-399-4100
Kinder-Morgan KME (Phillips/Conoco Terminals)	PO Box 66 Paw Creek, NC 28130	Phone: 704-399-6327
Marathon-Ashland Oil	P.O. Box 75 Paw Creek, NC 28130	**Manager: Terry Swick** Phone: 704-392-1345 Home: (b) (6) [redacted] Cell: (b) (6) [redacted] Fax: 704-392-3493
Airport Group International ASIG	6502 Old Dowd Rd. Charlotte, NC 28219	**Manager: Tom Myron** Phone: 704-392-4351 Fax: 704-392-2307 Cell: (b) (6) [redacted]
ECO-Energy (Old Crown Terminal)	7720 Mt. Holly Rd Charlotte, NC 28214	**Manager: Chris Haywood** Phone: 704-392-6000 Cell: (b) (6) [redacted] E-Fax: 704-919-5408

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Chattanooga

SHIPPER	ADDRESS	TELEPHONE
Magellan Mid-Stream Partners (Williams Energy) "Magellan 1" (MTH)	4235 Jersey Pike Chattanooga, TN 37416	**Manager: Mark Misner** Phone: 423-892-5313 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Mgr Fax: 865-584-3820 Terminal Fax: 423-892-5304
Lincoln Energy	PLANT 4227 Cromwell Road Chattanooga, TN 37421 CORPORATE 22 South Main Street Greensboro, NC 29601	**Manager: David Montoya** Phone: 423-619-8191 Fax: 423-855-9851 Phone: 864-242-3003 Alternate: Mark Huff Cell: (b) (6) [redacted]
Citgo	4233 Jersey Pike Chattanooga, TN 37416	**Manager: Mike Owen** Phone: 423-892-5242 Cell: (b) (6) [redacted] Fax: 423-894-6801
Bright Start Energy, Inc.	PLANT 817 Pineville Road Chattanooga, TN 37405 CORPORATE 531 Roselane Street Suite 420 Marietta, GA 30060	PLANT **Manager: Darrell Allen** Phone: 423-756-8275 Cell: (b) (6) [redacted] Fax: 423-756-8277 CORPORATE **Senior VP: Brian Lawrence** Phone: 770-361-1668 Fax: 866-217-3076
Trans-Montaigne	11 Highway 193 Flintstone, GA 30725	**Manager: John Ford** Phone: 706-820-0826 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 706-820-1877
Magellan Mid-Stream Partners Southern Facilities "Magellan 2"	4326 Jersey Pike Chattanooga, TN 37416	**Manager: Mark Misner** Phone: 423-892-5717 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 865-584-3820
Kinder -Morgan	4716 Bonny Oaks Drive Chattanooga, TN 37416	**Manager: Berry Scott** Phone: 423-894-4936 Cell: (b) (6) [redacted] Fax: 423-499-8069

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Doraville

SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne Control Rm SCADA (b) (3), (b) (7)(F) [redacted]	2836 Woodwin Rd. Doraville, GA 30360	**Manager: Jay Bailey** Phone: 770-458-5588 Fax: 770-451-4298 Cell: (b) (6) [redacted]
BP	P.O. Box 47308 4064 Winters Chapel Rd. Doraville, GA 30360	**Manager: Alan Pyne** Phone: 770-457-2507, ext. 224 Cell: (b) (6) [redacted] Fax: 770-451- 6173 Oper Cell: (b) (6) [redacted] Oper Cell: (b) (6) [redacted]
Motiva West Terminal	4201 Winters Chapel Rd. Doraville, GA 30360	**Manager: Bill Jeckel** Phone: 770-451-0181 ext 228 Fax: 770-216-8565 Cell: (b) (6) [redacted] **Regional Manager: Chad Ewing** Office: 770-451-0181 ext 227 Cell: (b) (6) [redacted]
Chevron- Products	4026 Winters Chapel Rd. Doraville, GA 30360	**Manager: Joel Hall** Phone: 770-457-5251 Cell: (b) (6) [redacted] Fax: 770-457-5314 Head Operator: Vince Bailey Cell: (b) (6) [redacted] 24 HR Operator: 404-557-0076
Citgo Petroleum	3877 Flowers Rd Doraville, GA 30360	**Manager: Vince Brumbelow** Phone: 770-457-5268 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 770-936-8736 24 HR Cell: 404-550-0181
Magellan I	4149 Winters Chapel Rd. Doraville, GA 30360	**Manager: Bruce Landsverk** Phone: 770-457-3026 Phone: 770-457-6272 Cell: (b) (6) [redacted] Fax: 770-451-2409 24 HR Operator: 678-773-5284
Magellan II	2795 Woodwin Rd. Doraville, GA 30360	**Manager: Bruce Landsverk** Phone: 770-457-6272 Fax: 770-457-3049 24 HR Operator: 770-314-9309

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Doraville (Continued)		
Marathon- Petroleum Co L.P. **Emergency # 24/7: 877-627-5463**	6293 N. Peachtree Rd. Doraville, GA 30340	**Manager: Brandon Ruholt** Phone: 770-457-7233 Cell: (b) (6) [redacted] Fax: 770-986-3666 24 HR Operator: 404-597-1694
Motiva South	4127 Winters Chapel Rd. Doraville, GA 30360	**Manager: Chad Ewing** Phone: 770-451-0181 ext 227 Cell: (b) (6) [redacted] Fax: 770-457-8914 Superintendent: James Coad Phone: 770-451-018 ext 226 Cell: (b) (6) [redacted] 24 HR Operator: 404-516-2387
Magellan-Chattahoochee	2970 Parrott Ave. Atlanta, GA 30318	**Terminal Manager: Mark Calhoun** Office: 404-592-2542 Cell: (b) (6) [redacted] Fax: 404-794-1376 24 HR Operator: 404-693-7925 Email: mark.calhoun@magellanlp.com
Southeast Terminals (BP)	3132 Parrot Ave. Atlanta, GA 30318	**Manager: Rich Butela** Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Local Terminal Phone: 404-794-3371 Fax: 404-799-5938 Rich.butela@bp.com
Norfolk Southern Railroad	1680 Marietta Road Atlanta, GA 30318	**Manager: Terry Williams** Cell: (b) (6) [redacted] Phone: 404-792-5027 Mike White Phone: 423-326-7672 ER: Main Tower: 404-792-5032 Art Duggar: (b) (6) [redacted] Kevin Duggar: (b) (6) [redacted] Courtney Miller: (b) (6) [redacted] Fax: 404-794-3344 2nd Fax: 404-792-5022

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Doraville (Continued)		
Plantation Pipeline Company 24 HR EMERGENCY PPL CONTROLLER: 888-740-5124	2901 Woodwin Rd. Doraville, GA 30360	**O&M Supervisor: Shea Morris** Phone:770-751-4112 Cell:(b) (6) [redacted] 800-510-5678 Station:770-751-4112 Fax: 770-751-4104 **Operations Mgr:** James Wesley Melton Office: 770-824-4401 Cell: (b) (6) [redacted] Local Contact: Bobby Smith Office: 770-751-4172 Cell:(b) (6) [redacted] Burney Sproul-ROW Technician Phone: 770-751-4258 Cell: (b) (6) [redacted]
Plantation Pipeline Company	3000 Miller Academy Rd Bremen, GA 30110	Tank Farm Mgr: Kelly Carroll Office: 770-824-4421 Cell:(b) (6) [redacted] ROW Technician: Kirk Hopkins Office: 770-824-4401 Cell: (b) (6) [redacted] Operations Mgr: James Wesley Melton Office: 770-824-4401 Cell: (b) (6) [redacted] Station: 770-824-4420 24-hr Emergency: 800-510-5678

Fayetteville

SHIPPER	ADDRESS	TELEPHONE
Motiva Enterprises, LLC	992 Shaw Mill Rd. Fayetteville, NC 28311	**Manager: Otto Muha** FVD Phone: 910-488-2450 APEX Terminal: 919-362-8341 Cell:(b) (6) [redacted] Fax: 910-488-1772
Alternate: Tony Watterson		Home: (b) (6) [redacted] Cell: (b) (6) [redacted]

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Greensboro		
SHIPPER	**ADDRESS**	**TELEPHONE**
Magellan – Citgo	115 S. Chimney Rock Rd. Greensboro, NC 27409	**Manager: Reuben Qualls** Office: 336-299-3621 Cell: (b) (6) [redacted] Fax: 336-294-0690
Alternate: Bobby Sands **Alternate: Adam Cook**		Cell: (b) (6) [redacted] Cell: (b) (6) [redacted]
Apex Oil Company	6900 W. Market St. Greensboro, NC 27409	**Manager: Rusty Evans** Office: 336-854-8556 Fax: 336-854-8326
Alternate: Don Evans		Cell: (b) (6) [redacted]
Landmark Aviation	1060 PTI Drive Greensboro, NC 27409	**Manager: Donald Brookshire** Office: 336-668-0481 Office Direct: 336-544-2005 Cell: (b) (6) [redacted] Fax: 336-668-7862
Alternate: Shawn Harley, Operations Manager		Cell: (b) (6) [redacted] Office Direct: 336-544-2035
Magellan #1 (Southern Facilities)	115 S. Chimney Rock Rd. Greensboro, NC 2409	**Manager: Reuben Qualls** Office: 336-299-4167 Cell: (b) (6) [redacted] Fax: 336-632-0279
Alternate: William Harbin		Cell: (b) (6) [redacted]
Motiva Enterprises	101 S. Chimney Rock Rd. Greensboro, NC 27409	**Manager: Otto Muha** Office: 336-299-0331 Cell: (b) (6) [redacted] Fax: 336-292-4494
Alternate: Doug Witten		Cell: (b) (6) [redacted]
Kinder Morgan 2	6376 Burnt Poplar Rd. Greensboro, NC 27409	**Manager: Barry Furr** Office: 336-294-0889 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 336-299-9787
Alternate: Jeff Neal		Home: (b) (6) [redacted] Cell: (b) (6) [redacted]

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Greensboro (continued)		
Trans-Montaigne	6801 W. Market St. Greensboro, NC 27409	**Manager: Trey Rhodes** Office: 336-299-2611 Cell: (b) (6) [redacted] Fax: 336-632-1732 trhodes@transmontaigne.com
Alternate: Ron Gossage		Home: (b) (6) [redacted] Cell: (b) (6) [redacted]
Kinder-Morgan (Exxon)	6907 W. Market St. Greensboro, NC 27409	**Manager: Barry Furr** Office: 336-855-4460 or 4474 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 336-855-4473
Alternate: Ronnie Coble		Cell: (b) (6) [redacted]

Knoxville

SHIPPER	ADDRESS	TELEPHONE
Motiva	5001 Middlebrook Pike Knoxville, TN 37921	**Lead Terminal Operator: Frankie Langston** Phone: 865-588-8024 Manifold: (b) (6) [redacted] Cell: (b) (6) [redacted] Fax: 865-588-7085
Alternate: Gary Judkins **Alternate: Mike Nobles**		Phone: 615-350-7077 Cell: (b) (6) [redacted] Cell: (b) (6) [redacted]
Magellan WTH (Southern Facilities)	4801 Middlebrook Pike Knoxville, TN 37921	**Manager: Mark Misner** Phone: 865-588-9695 Cell: (b) (6) [redacted] Fax: 865-558-9261
Magellan MTH (Williams Energy)	5101 Middlebrook Pike Knoxville, TN 37921	**Manager: Mark Misner** Phone: 423-392-5313 Cell: (b) (6) [redacted] Fax: 865-584-5629
Citgo Petroleum **Alternate: Assistant Terminal Mgr: Donald Rogers**	2409 Knott Road Knoxville, TN 37921 Cell: 865-567-6579	**Manager: Mike Abba** Phone: 865-588-3555 Home: (b) (6) [redacted] Fax: 865-584-0369 **Lead Term Op: Kevin Clark** Phone: 865-599-0579 Manifold: (b) (6) [redacted] Cell: (b) (6) [redacted] Fax: 865-588-7085

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Knoxville (continued)		
Kinder-Morgan (Exxon)	5009 Middlebrook Pike Knoxville, TN 37921	**Manager: Stacy Rutherford** Phone: 865-584-4611 Cell: (b) (6) [redacted] Fax: 865-584-4613
Marathon-Ashland Petroleum, LLC	2601 Knott Road Knoxville, TN 37950	**Manager: Sean Phelp** Phone: 865-584-6928 Cell: (b) (6) [redacted] Fax: 865-588-6567
	5101 Middlebrook Pike Knoxville, TN 37921	**Manager: Mark Misner** Phone: 865-584-4924 Cell: (b) (6) [redacted] Fax: 865-584-5629
Cummins Terminal CZA	5100 North Middlebrook Pike Knoxville, TN 37921	**Manager: Blake Hodges** Phone: 865-588-1437 Cell: (b) (6) [redacted] Fax: 865-584-2132

Macon

SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne –BP (Southeast Terminals)	643-B E. McIntosh Road Griffin, GA 30223	**Manager: Allen Pangle** Phone: 770-227-2033 Cell: (b) (6) [redacted] Fax: 770-228-4478 Operator:Todd Tuggle 678-616-5642
Magellan	2505 Allen Road Macon, GA 31216	**Manager: Calvin Johnson (Albany)** Macon Office:478-788-2324 Manager Cell: (b) (6) [redacted] Macon Fax: 478-788-7186 Operator: Tim Nobles (Sr Oper) 478-319-1955
Marathon-Ashland Petroleum 24 HR MAPLINE – 877-627-5463	2445 Allen Road Macon, GA 31216	**Manager: Antoine Sims** Phone: 478-784-0595 Cell: (b) (6) [redacted] Fax: 478-784-0510 Operator: Anthony Mathuri 478-342-7646

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Macon (continued)		
Trans-Montaigne Southeast Terminals	173 US Highway 280 W. P.O. Box (31709) Americus, GA 31719	**Manager: Tony Snapp** Office: 229-924-3464 Cell: (b) (6) Fax: 229-928-5080 Operator: Jeremy VanZant Cell: (b) (6)
Trans-Montaigne Southeast Terminals	1909 E. Shotwell St Bainbridge, GA 31717	**Manager: Doug Bailey** Office: 229-246-0955 Cell : (b) (6) Fax: 229-246-6926 Operators: Robbie Meredith: (b) (6) Jeremy s (b) (6) Travis Adams (b) (6) Brock Smith (b) (6) Danny Grubbs (b) (6)
Motiva	1803 E. Shotwell St Bainbridge, GA 31717	**Manager: Jay Coad** Office: 229-246-4424 Mgr Office: 229-243-0213 Home: (b) (6) Cell: (b) (6) Fax: 229-248-1092 Op: Hal Clement (b) (6) Op: John Lee (b) (6) Op: Lloyd Messer (b) (6) Op: Don Morey (b) (6)
Trans-Montaigne Southeast Terminals	1162 Gillionville Road N Albany, GA 31701	**Manager: Jeff Gordon** Mgr Cell: (b) (6) Phone: 229-435-4014 Op: Corey Kelly (b) (6) Op: Mike Corbin (b) (6) Op: Chris Finely (b) (6) Op: Keith Hunter: (b) (6)
Trans-Montaigne Southeast Terminals	5041 Forsyth Road Macon, GA 31210	**Area Manager: Ed Watts** Office: 478-477-1711 Cell: (b) (6) Fax: 478-471-9454 Op: Seth Fuller 478-733-4722

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Macon (continued)		
Magellan (Williams) 24 HR Tulsa CC: 800-720-2417	1722 W Oakridge Drive Albany, GA 31707	Region Manager: Calvin Johnson Phone: 229-436-5551 Cell: (b) (6) [redacted] Fax: 229-436-0004 Pernel Saunders (b) (6) [redacted] Op: Joe Knighton (b) (6) [redacted] Op: Clint Eudy (b) (6) [redacted]
Vec Energy	2476 Allen Road South Macon, GA 31216	Regional Manager: Craig Smith Office: 478-788-5511 ext 0 Cell: (b) (6) [redacted] Fax: 478-781-6626 Terminal Mgr: Kevin Coleman Cell: (b) (6) [redacted] Operators: Jeff Sofrance (b) (6) [redacted] Sharon Greene (b) (6) [redacted] Corey McCory (b) (6) [redacted] Russel Ewell (b) (6) [redacted] 24 HR Operator: 478-335-8430
Kinder-Morgan (Phillips Petroleum)	1603 W. Oakridge Dr Albany, GA 31707	**Manager: Anthony Shumpert** Phone: 706-*561-0221 x27 Cell: (b) (6) [redacted] Fax:229-883-2907 Operations Manager KMST:Wilkin Sherrod Office: 770-751-4151 Cell: (b) (6) [redacted] OP: Cantrell Sias (b) (6) [redacted] OP: Joe Schmidt (b) (6) [redacted]
Nashville		
SHIPPER	**ADDRESS**	**TELEPHONE**
American Airlines (AFIG)	929 Airport Service Road Nashville, TN 37214	**Manager: Bryan Hubbard** Phone: 615-678-0761 Cell: (b) (6) [redacted] Fax: 615-275-3611 Bryan.hubbard@asig.com
Magellan Group 2	1441 51st Avenue North Nashville, TN 37209	**Manager: Lee Pickett** Phone: 615-269-4582 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 615-269-4583

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Marathon-Ashland Petroleum, LLC – Ashland Downtown	5 Main Street Nashville, TN 37209	**Manager: Brad Kaiser** Office: 615-254-1482 Cell: (b) (6) [redacted] Fax: 615-254-4621 Manager: Bobby Winters Cell: (b) (6) [redacted] Fax: 615-254-4621
Marathon Petroleum LLC	1409 51st Avenue North Nashville, TN 37209	**Manager: Bobby Winters** Phone: 615-297-3521 Cell: (b) (6) [redacted] Fax: 615-269-0822
Exxon-Mobil	1741 Ed Temple Boulevard Nashville, TN 37208	**Manager: Connie Benson** Phone: 615-244-7671 Cell: (b) (6) [redacted] Fax: 615-242-0272
Alternate: Rodney Ganter		Cell: (b) (6) [redacted]
Lion Oil Company	90 Van Buren Street Nashville, TN 37208	**Manager: Wesley Penn** Cell: (b) (6) [redacted] Fax: 615-255-6310 Wesley.penn@lionoil.com
Marathon-Ashland Petroleum, LLC Bordeaux Alternate: Terrance Roberts	2920 Old Hydes Ferry Road Nashville, TN 37218	**Manager: Brad Kaiser** Office: 615-244-3670 Cell: (b) (6) [redacted] Fax: 615-242-9229 Manager: Bobby Winters Office: 615-313-3716 Cell: (b) (6) [redacted]
Magellan Group 1	1609 63rd Avenue North Nashville, TN 37209	**Manager: Lee Pickett** Phone: 615-269-6578 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 615-298-5836
Alternate: John Blankendall		Cell: (b) (6) [redacted]

Citgo	720 South 2nd Street Nashville, TN 37213-1429	**Manager: Mark Redditt** Phone: 615-244-6555 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 615-244-6556 mreddit@citgo.com
Alternate: Bill Carmen		Home: (b) (6) [redacted] Cell: (b) (6) [redacted]

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Nashville (continued)		
Motiva Enterprises	1717 61st Avenue North Nashville, TN 37209	**Supervisor: Gary Judkins** Phone: 615-350-7077 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 615-350-7087
Alternate: Ben Graham		Home: (b) (6) [redacted]
Cumberland Terminals	7260 Centennial Boulevard Nashville, TN 37209	**Manager: Sonny Lockett** Phone: 615-350-7333 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 615-350-7345
Alternate: Richard Cummins Jr.		Cell: (b) (6) [redacted]

Pelham

SHIPPER	ADDRESS	TELEPHONE
Citgo Petroleum Corp.	2200 25th Street SW Birmingham, AL 35211	**Manager: Greg Butke** Phone: 205-925-6641 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 205-925-9391 gbutcke@citgo.com
Alternate: Bennet Lafoss		**blafoss@citgo.com**
Buckeye Operator: Jim Arrington Operator: Jeremy Willis Operator: Greg Jennings	1600 Mims Avenue SW Birmingham, AL 35211 jarrington@buckeye.com jwillis@buckeye.com gjennings@buckeye.com	Manager: Dan Defee Cell: (b) (6) [redacted] Phone: 205-925-1824 Fax: 205-925-6311 Cell: (b) (6) [redacted] Cell: (b) (6) [redacted] Cell: (b) (6) [redacted]
Magellan Mid Stream Partners Alternate: Adam Silby	2400 Nabors Road Birmingham, AL 35211	**Manager: Calvin Johnson** Phone: 205-925-8546 Cell: (b) (6) [redacted] Fax: 205-925-8547 Cell: (b) (6) [redacted]
Marathon Petroleum, LLC	2704 28th Street SW Birmingham, AL 35211	**Manager: Justin Miller** Office: 205-925-7037 Cell: (b) (6) [redacted] Fax: 205-925-7039

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Pelham (continued)		
Chevron	2400 28th Street Southwest Birmingham, AL 35211	**Manager: John Bessant** Phone: 205-925-3914 x225 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 205-925-1878 johnbessant@chevron.com
Kinder-Morgan	2635 Balsom Ave. SW Birmingham, AL 35211	**Manager: Glenn Williamson** Phone: 205-925-7685 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 205-925-6149 Glenn_williamson@kindermorgan.com
Allied Energy Alternate: Chase Williamson	**TERMINAL** 2700 Ishkooda Wenonah Birmingham, AL 35211 **CORPORATE** 2057 Valleydale Road Suite 100 Birmingham, AL 35244	**Manager: Herb Jernigan** Phone: 205-925-6600 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 205-925-5004 Herb.jernigan@alliedenergycorp.com cwilliamson@alliedenergycorp.com
Kinder-Morgan Plantation Pipeline Operations Supervisor: Terry McCary	P.O. Box 489 Helena, AL 35080	**Manager: Steve Polk** Cell: (b) (6) [redacted] Phone: 205-663-8840 x8844 Cell: (b) (6) [redacted]
Murphy Oil	2625 Highway 78 East Anniston, AL 36207	**Manager: Joey Howell** Phone: 256-831-0201 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 256-831-8654
Hunt Refinery	PLANT 1855 Fairlawn Road Tuscaloosa, AL 35401 CORPORATE 2200 Jack Warner Pkwy Ste 400 Tuscaloosa AL 35403-8995 P.O. Box 038995 Tuscaloosa AL 35403-8995 P.O. Box 038995 Tuscaloosa AL 35403-8995	**PLANT:** **Manager: Matt Lambert** **Phone: 205-391-1328** **Cell:** (b) (6) [redacted] **CORPORATE:** **Manager: Danny Hoppis** Phone: 205-391-3387 Phone: 205-391-3333 Cell: (b) (6) [redacted]

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Pelham (continued)		
Motiva Complex Manager: Chad Ewing Operator: Marty Etienne	2601 Wilson Road Birmingham, AL 35211	Manager: Gary Judkins Office: 615-350-7077 Cell: (b) (6) [redacted] Fax: 205-925-1121 Complex Manager: Chad Ewing Cell: (b) (6) [redacted] Operator: Marty Etienne: Cell: (b) (6) [redacted] Or: Bradley Peck/Op:Monroe Jenkins
Bama Terminaling and Trading Alternate: Tim Cosby	2529 28th Street SW Birmingham, AL 35211	**Manager: Jason Richardson** Office: 205-909-0700 Cell: (b) (6) [redacted] Fax: 205-923-7849 jrichardson@bamaterminaling.com Cell: (b) (6) [redacted] tim@bamaterminaling.com

Raleigh-Durham

SHIPPER	ADDRESS	TELEPHONE
RDU Airport Authority	P.O. Box 80665 2800 Terminal Rd. RDU Airport, NC 27623	**Manager: Alex Romel** Office: 919-840-7774 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 919-840-1799
Alternate: Bill Slusher		Office: 919-840-7853 Cell: (b) (6) [redacted]

Selma

SHIPPER	ADDRESS	TELEPHONE
Marathon Selma Buffalo Terminal	P.O. Box 248 Selma, NC 27576	**Manager: Roger Lamberth** Office: 919-965-3751, 52 or 59 Cell: (b) (6) [redacted] Fax: 919-965-9468 rwlamberth@marathonpetroleum.com
Alternate: Fred Bailey **Alternate: Mike Keel** **Alternate: Michael House**		Home: (b) (6) [redacted] Cell: (b) (6) [redacted] Cell: (b) (6) [redacted] Cell: (b) (6) [redacted]
ARC Terminal Company	P.O. Box 68 Selma, NC 27576	**Manager: Richard Williams** Office: 919-965-2769 Cell: (b) (6) [redacted] Fax: 919-965-4577
Alternate: Ben Smith		Home: (b) (6) [redacted] Cell: (b) (6) [redacted]

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Selma (continued)		
Citgo	4095 Buffalo Rd Selma, NC 27576	**Manager: Hal Hardison** Office: 919-965-3746 Cell: (b) (6) [redacted] Fax: 919-965-3536
Alternate: Jeff McKeel		Home: (b) (6) [redacted] Cell: (b) (6) [redacted]
Marathon Petroleum LLC.	2555 Oak St. Selma, NC 27576	**Manager: Ray Rhode** Office: 919-965-8448 or 3201 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 919-965-6341 rorhode@marathonpetroleum.com
Alternate: Jason Harris		Primary Cell: (b) (6) [redacted] jaharris@marathonpetroleum.com
Trans-Montaigne	P.O. Box 10 Selma, NC 27576	**Manager: Terry Murray** Phone: 919-965-9442 Cell: (b) (6) [redacted] Fax: 919-965-9473
Alternate: Chris Hales **Alternate: Operator on Duty**		Cell: (b) (6) [redacted] Cell: (b) (6) [redacted]
Kinder-Morgan 4 (Phillips Petroleum)	P.O. Box 66 4086 Buffalo Rd. Selma, NC 27576	Non Staffed Facility (Kinder Morgan 1)
Alternate: Kinder Morgan 1		Office: 919-965-6043
Magellan	P.O. Box 338 4414 Buffalo Rd Selma, NC 27576	**Manager: Jimmie Williamson** Office: 919-965-5217 Cell: (b) (6) [redacted] Fax: 919-965-5495
Alternate: Larry Edwards		Cell: (b) (6) [redacted]
Kinder-Morgan 1	2200 West Oak Street Selma, NC 27576	**Manager: Brian Pilkington** Office: 919-965-6043 Cell: (b) (6) [redacted] Fax: 919-965-4201
Alternate: David Pittman **Alternate: On Call Operator**		Cell: (b) (6) [redacted] Cell: (b) (6) [redacted]

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Spartanburg		
SHIPPER	**ADDRESS**	**TELEPHONE**
Magellan 1 (MTH)	650 Delmar Rd. Spartanburg, SC 29302	**Manager: Phil Garner** Phone: 864-583-8375 Cell: (b) (6) Home: (b) (6) Fax: 864-591-0461
Alternate: John Floyd		Cell: (b) (6)
Trans-Montaigne (Hess) (THL)		**Manager: David Millard** Phone: 864-585-5447 Home: (b) (6) Fax: 864-585-0556 Manifold Phone: (b) (6) Cell: (b) (6)
Alternate: Steve Young **Randy Beeks**		Cell: (b) (6) Cell: (b) (6)
BET Buckeye	680 Delmar Rd. Spartanburg, SC 29302	**Lead: Keith Tutterow** Phone: 864-583-2670 Cell: (b) (6) Fax: 864-583-1520
Alternate: Mike Garner		Cell: (b) (6)
Magellan 2 (WTH)	2430 South Pine Extension Spartanburg, SC 29302	**Manager: Jimmy Vaughn** Phone: 864-585-2480 Cell: (b) (6) Home: (b) (6) Fax: 864-864-591-0828
Alternate: Joe Landsverk		Cell: (b) (6)
Citgo-Motiva (CIT)	2590 Southport Rd. Spartanburg, SC 29302	**Manager: Bob Patrick** Phone: 864-583-5424 Cell: (b) (6) Home: (b) (6) Fax: 864-562-4501
Alternate: Hal Hardison		Cell: (b) (6)
Kinder-Morgan (KME) (Phillips Petroleum) KME Pipeline	200 Nebo St. Spartanburg, SC 29302	**Manager: Jerry A. Crowder** Phone: 864-582-0066 Cell: (b) (6) Home: (b) (6) Fax: 864-582-3027 Office: 864-585-7862
Alternate: Richard Black		Home: (b) (6) Cell: (b) (6)

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Spartanburg (continued)		
Motiva Enterprises, LLC (MTV)	300 Delmar Rd. Spartanburg, SC 29302	**Lead: Matt Burrell** Phone: 864-583-1445 Cell: (b) (6) [redacted] Home: (b) (6) [redacted] Fax: 864-583-1446
Alternate: Matt Burrell **Alternate: Rob Elledge** **Alternate: Randy Fisher**		Cell: (b) (6) [redacted] Cell: (b) (6) [redacted] Cell: (b) (6) [redacted]

Colonial Pipeline Company

EMERGENCY CARE FACILITIES

Southeast Response Zone

(Facilities listed are located along Colonial Pipeline's ROW)

Facility Name	Address	City, State, Zip Code	Telephone No.
North Carolina Area			
Burlington/ Alamance County			
Alamance Regional Medical Center	1240 Huffman Mill Road	Burlington, NC 27215	336-538-7000
Charlotte			
Carolinas Medical Center - Northeast	920 Church Street North	Concord, NC 28025	704-403-3000
Carolinas Medical Center (Level 1 Trauma Center)	1000 Blythe Boulevard	Charlotte, NC 28203	704-355-2000
Gaston Memorial Hospital	2525 Court Drive	Gastonia, NC 28052	704-834-2000
Fayetteville			
Cape Fear Valley Medical Center	1638 Owen Drive	Fayetteville, NC 28304	910-615-4000
Greensboro			
Moses Cone Hospital	1200 N. Elm Street	Greensboro, NC 27401	336-832-7000
Forsyth Medical Center	3333 Silas Creek Parkway	Winston Salem, NC 27103	336-718-5000
Wake Forest Baptist Hospital	Medical Center Blvd.	Winston Salem, NC 27157	336-716-2011
Kernersville Medical Center	1750 Medical Parkway	Kernersville NC 27284	336-564-4000
Selma			
Johnston Medical Center	509 N. Bright Leaf Blvd.	Smithfield, N.C.27577	919-934-8171
South Carolina Area			
Spartanburg Regional Medical Center	101 East Wood Street	Spartanburg, SC 29303	864-454-6100
Upstate Carolina Medical	1530 N. Limestone Street	Gaffney, SC 29340	864-487-4271
Hillcrest Memorial Hospital	729 South East Main Street	Simpsonville, SC 29681	864-487-4271
Anderson Area Medical Center	800 N. Fant Street	Anderson, SC 29621	864-261-1000
Greenville Memorial Medical Campus	701 Grove Road	Greenville, SC 29605	864-455-7000

Colonial Pipeline Company

EMERGENCY CARE FACILITIES

Facility Name	Address	City, State, Zip Code	Telephone No.
Georgia Area			
Hart County Hospital	138 W. Gibson Street	Hartwell, GA 30643	706-856-6100
Athens Regional Medical Center	1199 Prince Avenue	Athens, GA 30606	706-475-7000
Atlanta			
Grady Memorial Hosp.	80 Jesse Hill Jr Dr SE	Atlanta, GA 30303	404-616-1000
St. Joseph's Hospital	5665 Peachtree Dunwoody Rd NE	Atlanta, GA 30342	678-843-7001
Northside Hospital	1000 Johnson Ferry Rd NE	Atlanta, GA 30342	404-361-1732
Cobb / Douglas Counties			
Wellstar Douglas Hosp.	8954 Hospital Drive	Douglasville, GA 30134	770-949-1500
Wellstar Kennestone Hospital	677 Church Street	Marietta, GA 30060	770-793-5000
Wellstar Cobb Hosp.	3950 Austell Road	Austell, GA 30106	770-732-4000
Bremen, GA			
Higgins Gen. Hosp.	200 Allen Memorial Dr	Bremen, GA 30110	770-824-2201
Rome, GA			
Redmond Regional Medical Center	501 Redmond Road	Rome, GA 30165-3019	706-291-0291
Cartersville, GA			
Cartersville Medical Center	960 Joe Frank Harris Parkway	Cartersville, GA 30120	770-382-1530
Lawrenceville / Gwinnett County			
Gwinnett Medical Center	1000 Medical Center Boulevard	Lawrenceville, GA 30046	678-312-1000
Barrow County			
Barrow Regional Medical Center	316 North Broad Street	Winder, GA 30680	770-867-3400
Griffin, GA			
Spalding Regional Medical Center	601 South 8th Street	Griffin, GA 30224	770-228-2721
Macon, GA			
Medical Center of Central Georgia	777 Hemlock Street	Macon, GA 31201	478-633-1000

Colonial Pipeline Company

EMERGENCY CARE FACILITIES

Facility Name	Address	City, State, Zip Code	Telephone No.
Albany, GA			
Phoebe Putney Memorial Hospital	417 Third Avenue	Albany, GA 31701	877-312-1167
Bainbridge, GA			
Memorial Hospital and Manor	1000 E. Shotwell Street	Bainbridge, GA 39819	229-246-3500
Americus, GA			
Sumter Regional Hospital	100 Wheatley Drive	Americus, GA 31709	229-924-6011
Alabama Area			
Birmingham, AL			
UAB Hospital	2000 6th Avenue South	Birmingham, AL 35233	205-934-4011
St. Vincent's Hospital	810 Saint Vincent's Drive	Birmingham, AL 35205	205-939-7111
Princeton Baptist Medical Center	701 Princeton Avenue SW	Birmingham, AL 35211	205-783-3000
Brookwood Medical Center	2010 Brookwood Medical Center Drive	Birmingham, AL 35209	205-877-1000
Bolligee, AL			
Green County Hospital	509 Wilson Avenue	Eutaw, AL 35462	205-372-3388
Hale County Hospital	508 Green Street	Greensboro, AL 36744	334-624-3024
Bryan Whitfield Hospital	203 South Cedar Avenue	Demopolis, AL 36732	334-287-2437
Heflin, AL			
Jacksonville Medical Center	1701 Pelham Road South	Jacksonville, AL 36265	256-435-4970
Noland Hospital of Anniston	400 East 10th Street	Anniston, AL 36207	256-236-6121
Helena, AL			
Shelby Baptist Medical Center	1000 1st Street North	Alabaster, AL 35007	205-620-8100
Moundville, AL			
Green County Hospital	509 Wilson Avenue	Eutaw, AL 35462	205-372-3388
DCH Regional Medical Center	809 University Boulevard East	Tuscaloosa, AL 35401	205-759-7111
Oxford, AL			

Colonial Pipeline Company

EMERGENCY CARE FACILITIES

Facility Name	Address	City, State, Zip Code	Telephone No.
Noland Hospital of Anniston	400 East 10th Street	Anniston, AL 36207	256-236-5121
Stringfellow Memorial Hospital	301 East 18th Street	Anniston, AL 36207	256-235-8900
N E Regional Medical Center	309 East 5th Street	Anniston, AL 36207	256-237-4906
Pelham, AL			
Shelby Baptist Medical Center	1000 1st Street North	Alabaster, AL 35007	205-620-8100
St. Ives, AL			
St. Vincent's St. Clair Hospital	2900 Dr. John Haynes Drive	Pell City, AL 35125	205-338-3301
Trinity Medical Center	800 Montclair Road	Birmingham, AL 35213	205-592-1000
Vance / West Blocton, AL			
DCH Regional Medical Center	809 University Boulevard East	Tuscaloosa, AL 35401	205-759-7111
Tennessee Area			
Chattanooga, TN			
Parkridge Hospital	2333 McCallie Avenue	Chattanooga, TN 37404	423-698-6061
Parkridge East Hospital	941 Spring Creek Road	Chattanooga, TN 37412	423-894-7875
Parkridge West Hospital	1000 Tennessee 28	Jasper, TN 37401	423-837-6500
Erlanger Medical Center	975 East 3rd Street	Chattanooga, TN 37403	423-778-7000
Cleveland, TN			
Skyridge Medical Center	2305 Chambliss Avenue NW	Cleveland, TN 37311	423-559-6000
Athens Regional Medical Center	1114 West Madison Avenue	Athens, TN 37303	423-745-1411
Coalmont, TN			
Grundy EMS, Inc.	90 Phipps Street	Coalmont, TN 37313	931-592-2262
Tift Regional Medical Center	2225 U.S. 41	Tifton, GA 31794	229-391-4100
Knoxville, TN			
University of Tennessee Medical Center	1924 Alcoa Highway	Knoxville, TN 37920	865-305-9000
Fort Sanders Regional Medical Center	1901 Clinch Avenue	Knoxville, TN 37916	865-541-1111
Parkwest Medical Center	9352 Park West Boulevard	Knoxville, TN 37923	865-373-1000

Colonial Pipeline Company

EMERGENCY CARE FACILITIES

Facility Name	Address	City, State, Zip Code	Telephone No.
Murfreesboro, TN			
Middle Tennessee Medical Center	1700 Medical Center Parkway	Murfreesboro, TN 37129	615-396-5530
Stonecrest Medical Center Emergency Room	200 Stonecrest Boulevard	Smyrna, TN 37167	615-768-2000
Nashville, TN 37213			
Concentra Medical Center	2531 Elm Hill Pike	Nashville, TN 37214	615-883-6995
Southern Hills Medical Center	391 Wallace Road	Nashville, TN 37211	615-781-4000
Baptist Hospital	2000 Church Street Alley	Nashville, TN 37236	615-284-5555
Kindred Hospital–Nashville	1412 County Hospital Road	Nashville, TN 37218	615-687-2600
Nashville General Hospital	1818 Albion Street	Nashville, TN 37208	615-341-4000
Saint Thomas Hospital	4220 Memphis-Bristol Hwy	Nashville, TN 37205	615-284-5433
Sweetwater, TN			
Fort Loudon Medical Center	550 Fort Loudon Medical Center Drive	Lenoir City, TN 37772	865-271-600
Athens Regional Medical Center	1114 West Madison Avenue	Athens, TN 37303	423-745-1411

Colonial Pipeline Company

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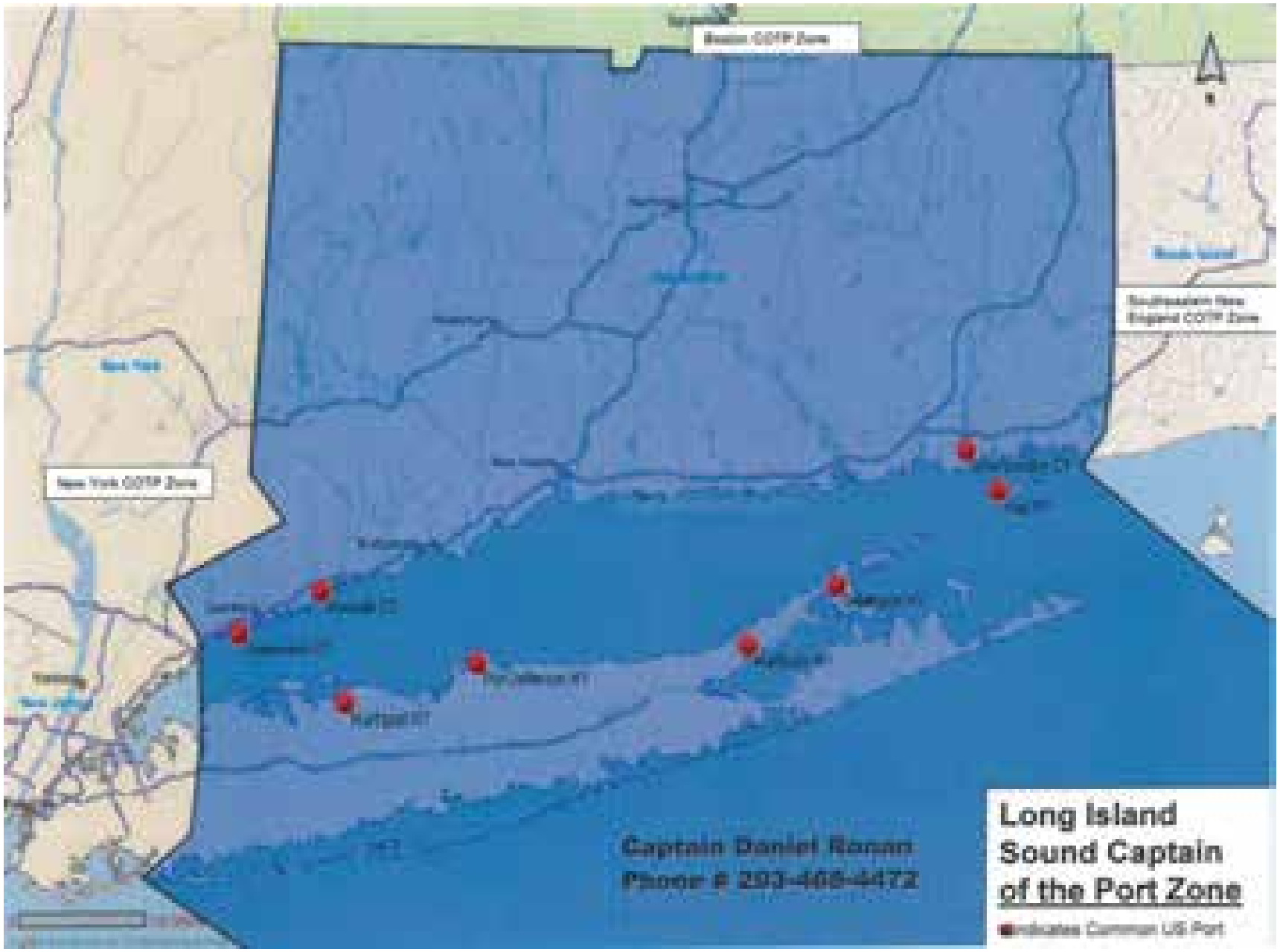

Colonial Pipeline Company

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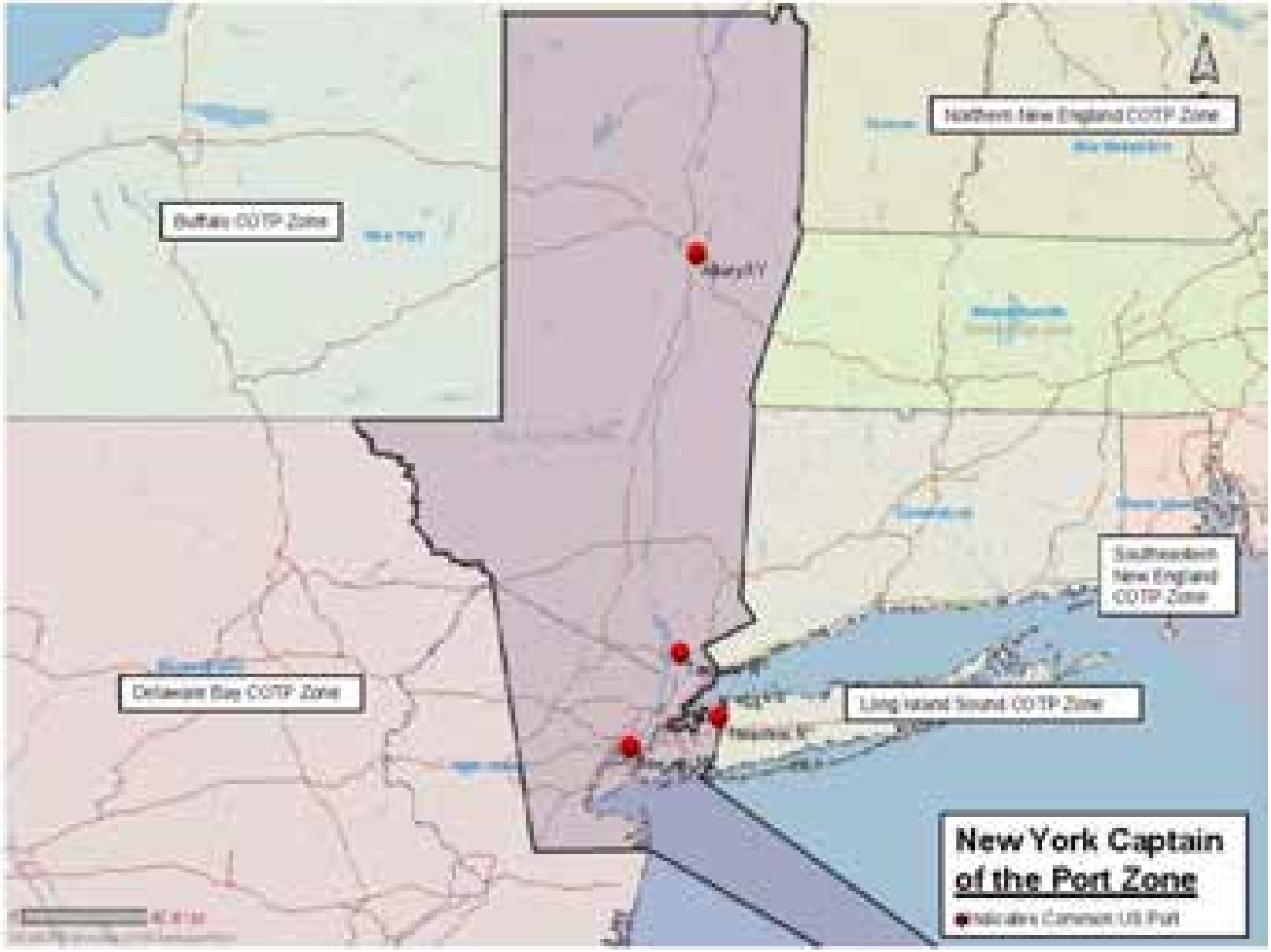

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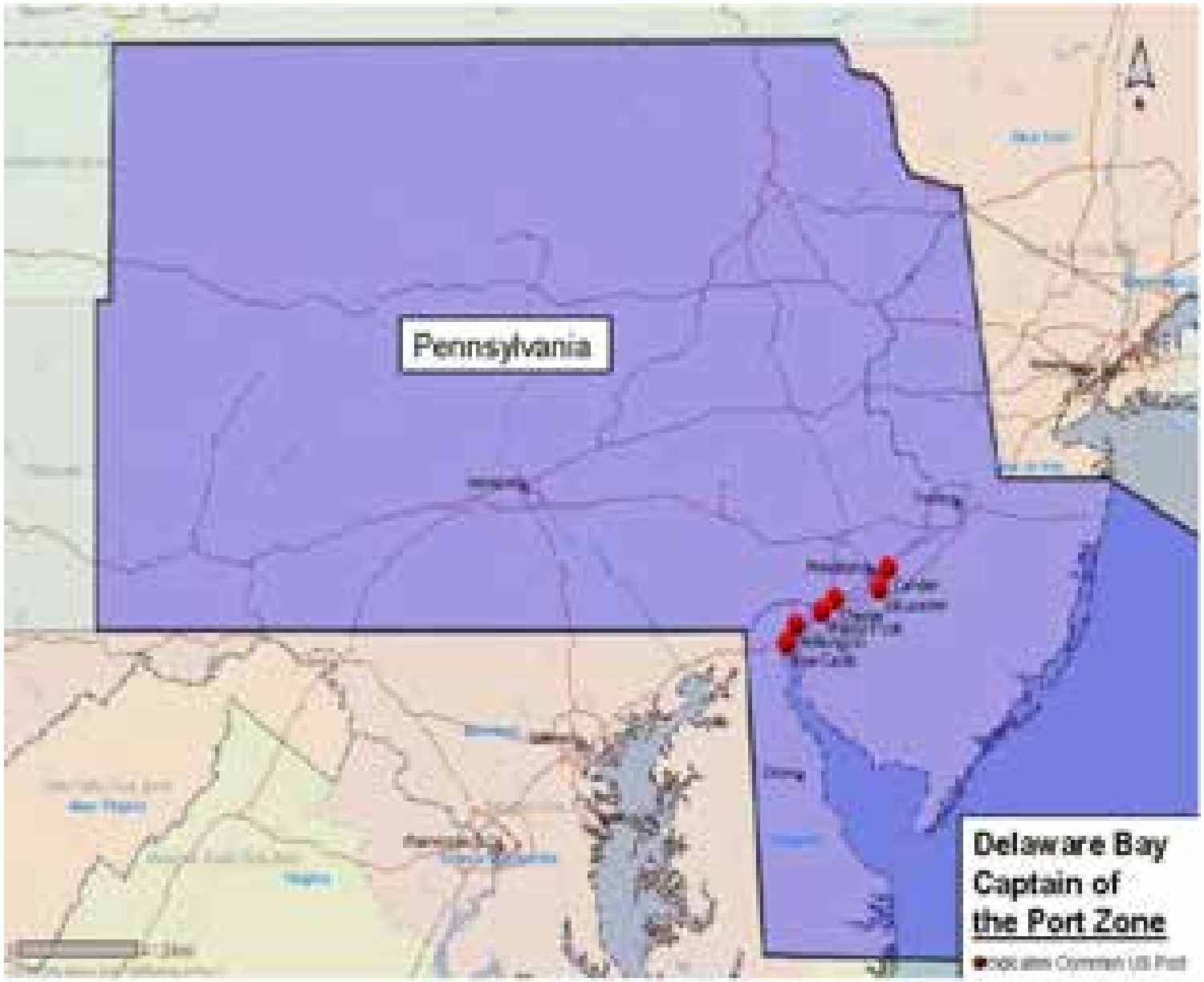

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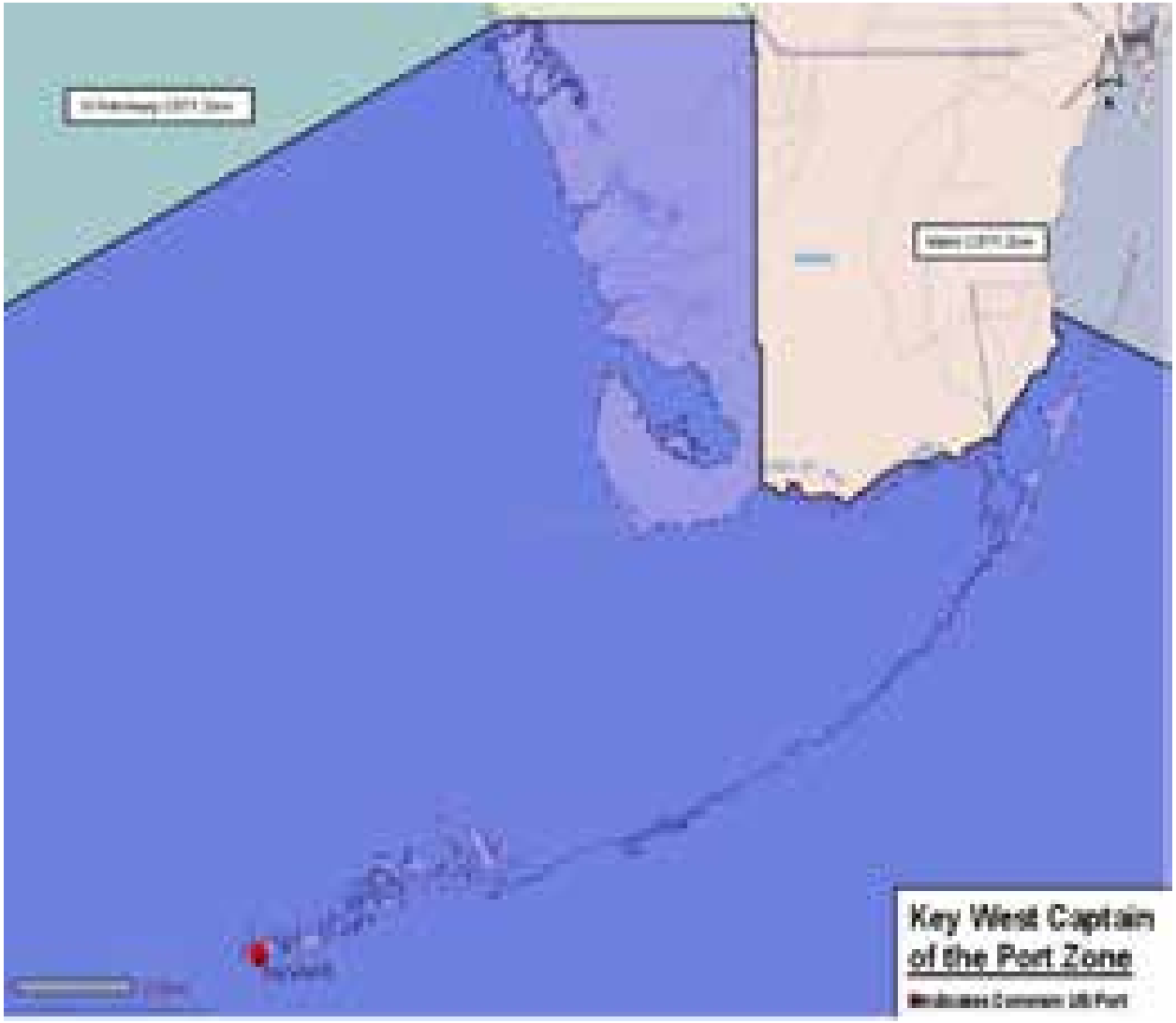

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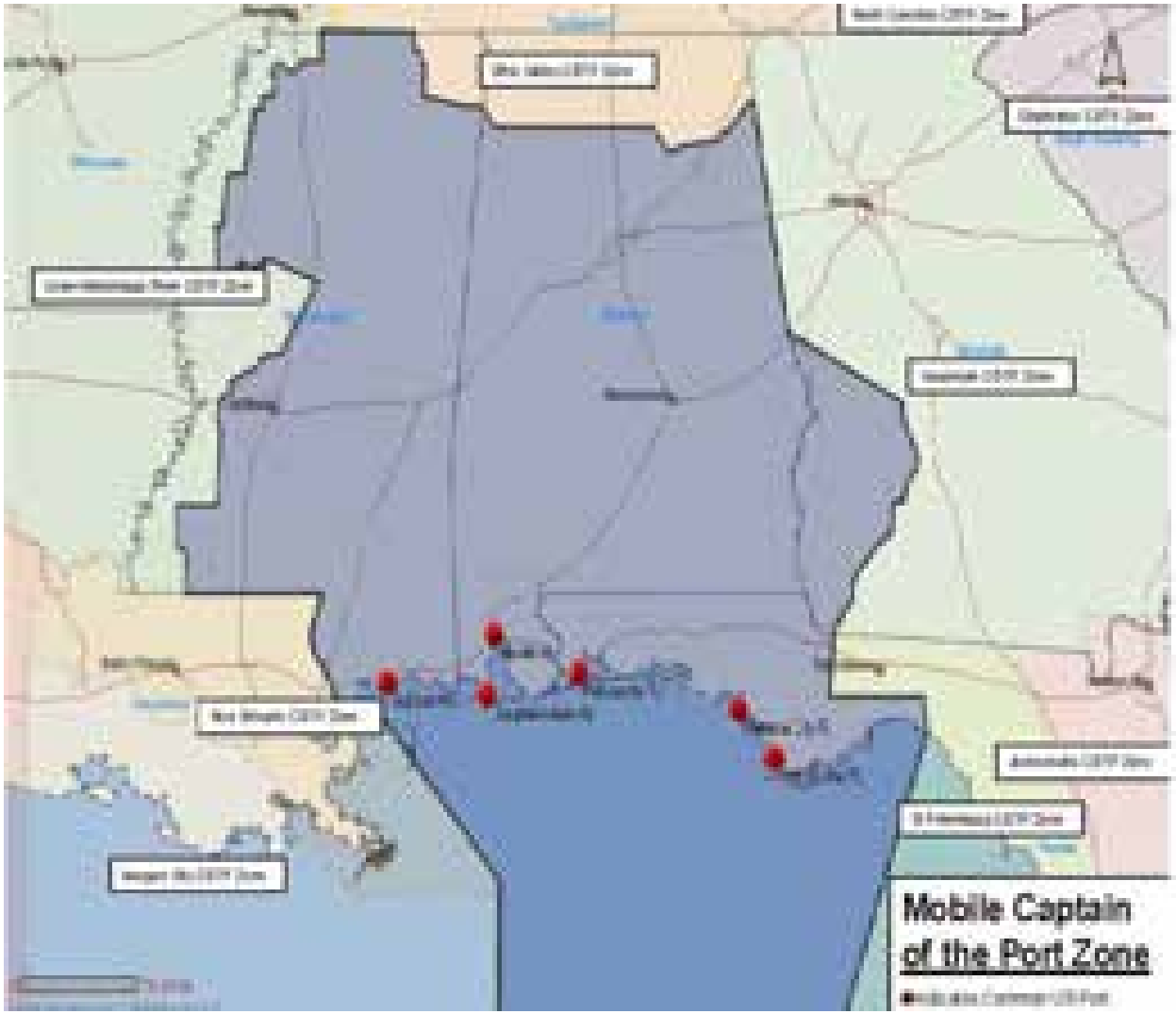

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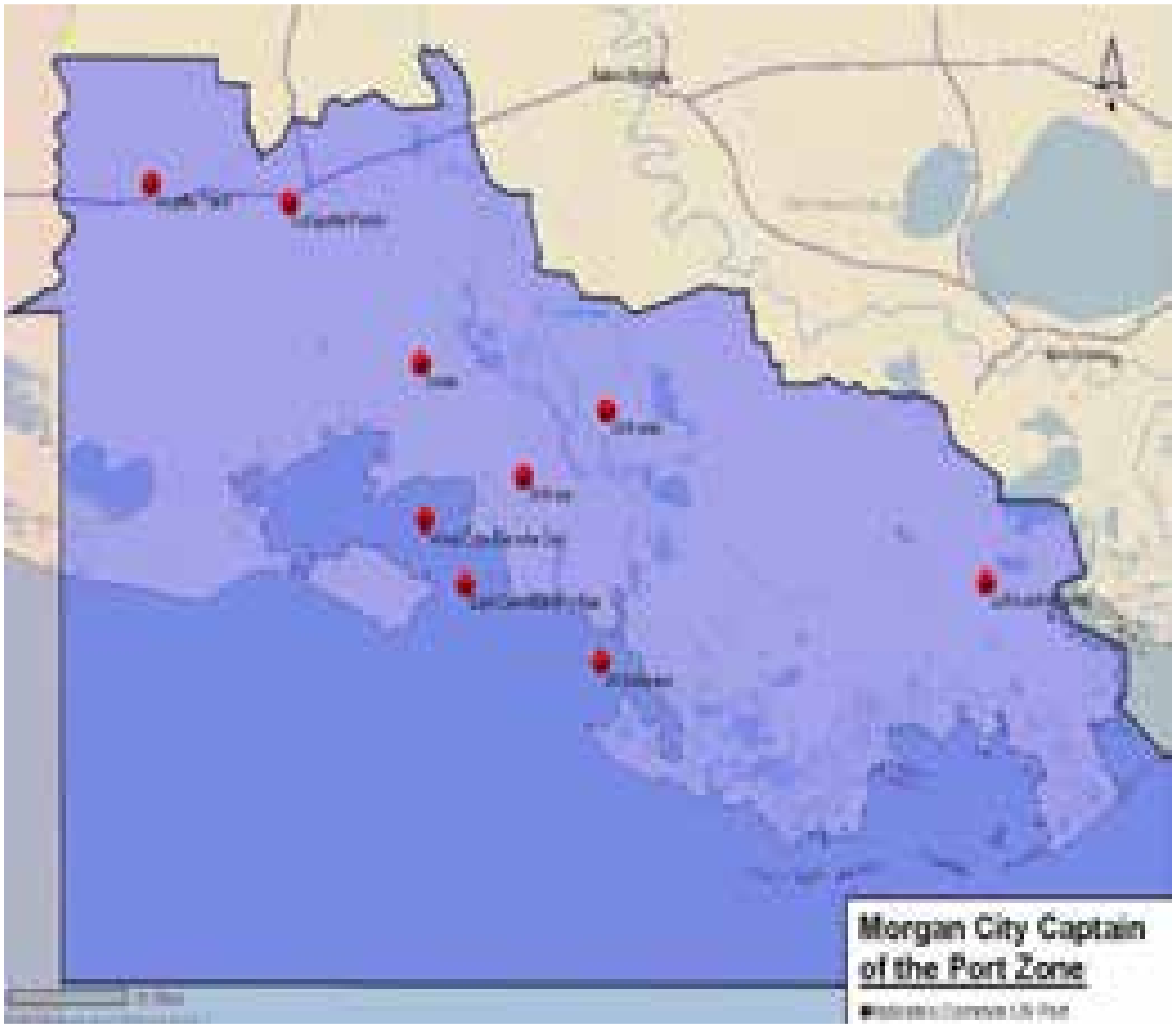

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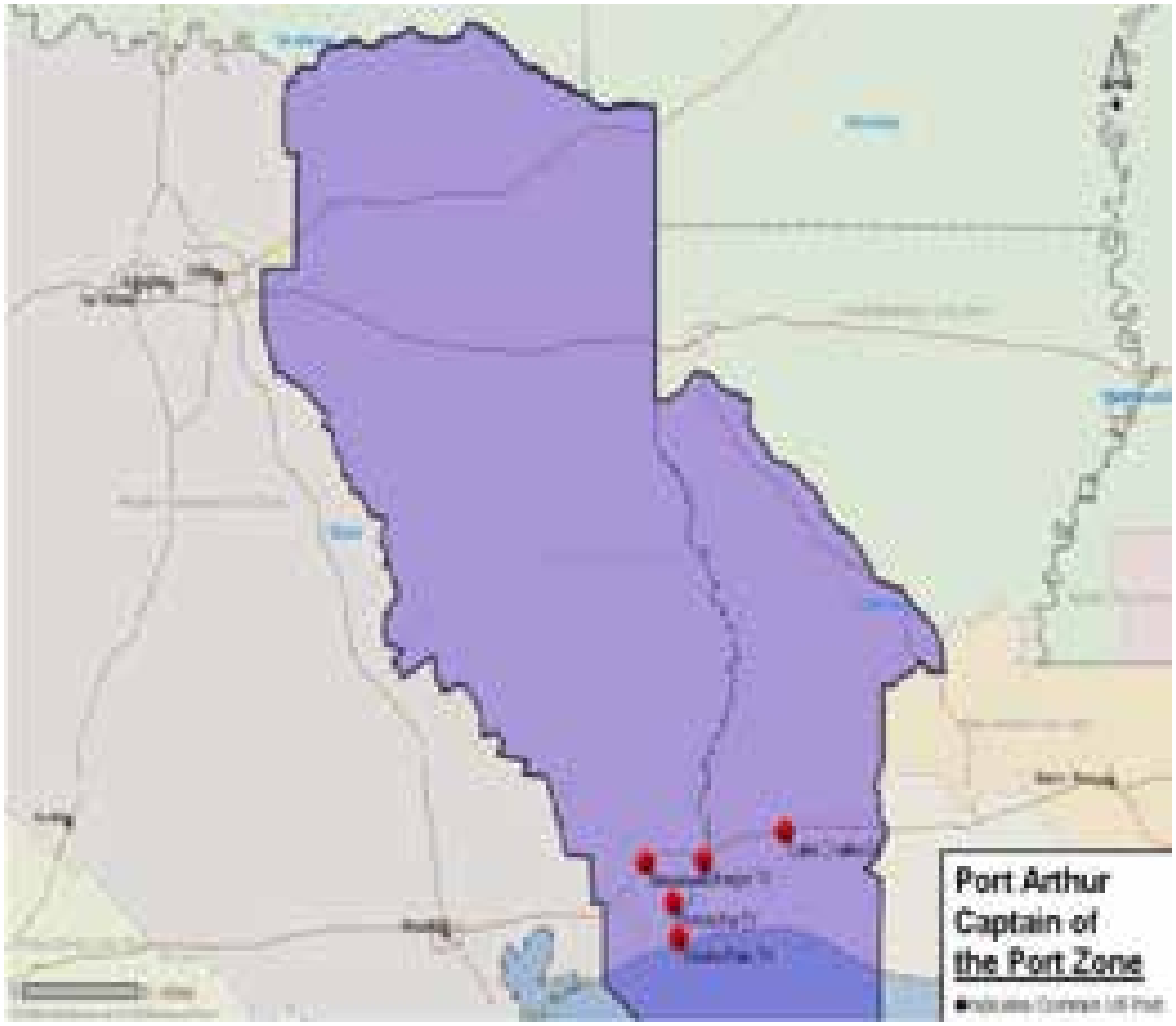

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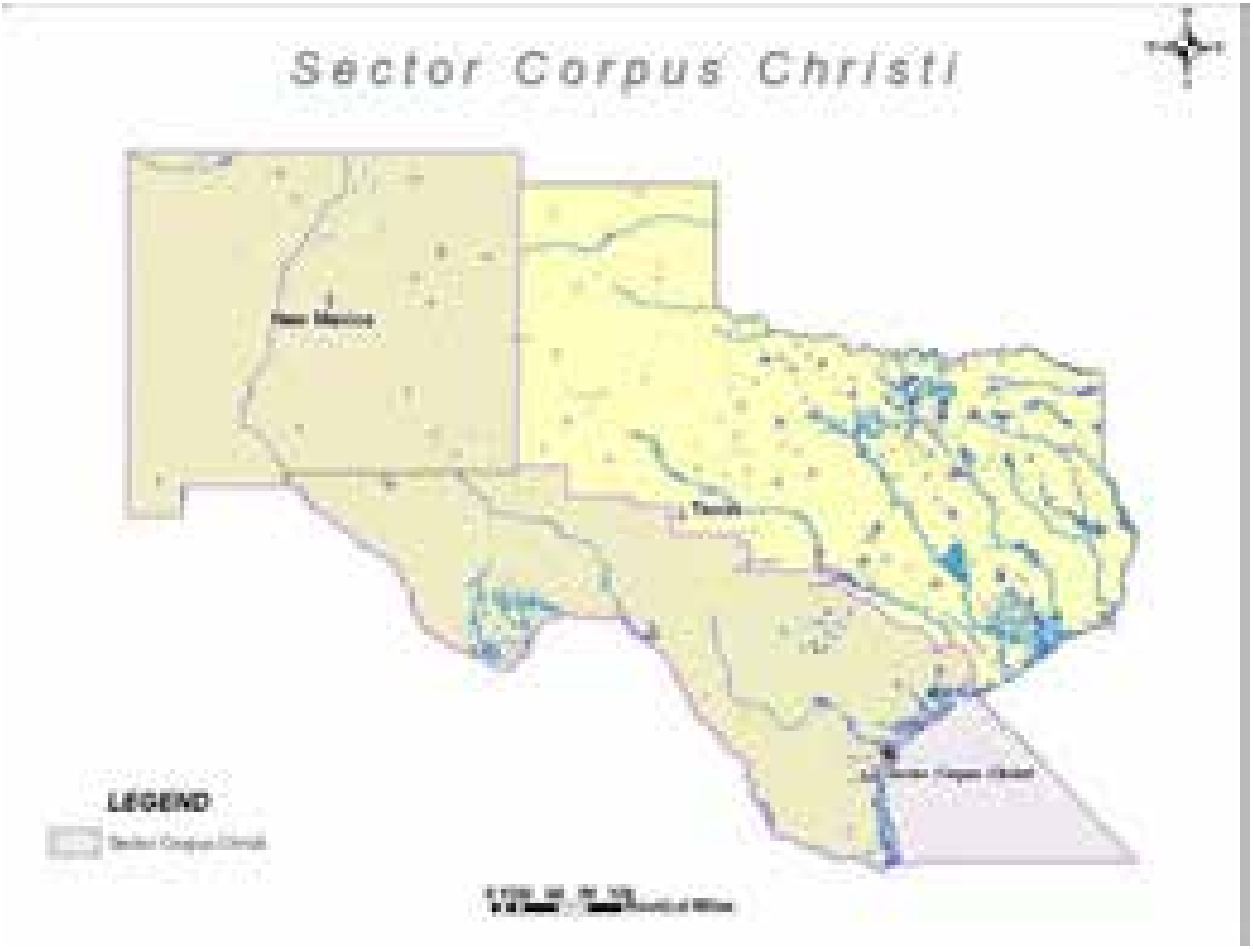

Colonial Pipeline Company
TRAINING

Colonial personnel who are likely to respond to an emergency situation will be trained to commensurate the responsibilities that are assigned to them. Listed below are the training requirements for spill response. The potential need for additional training or adjustments to the current training curriculum will be addressed during post exercise and response evaluations of Colonial's response effectiveness as described in Sections 4.04 and 7.01.

HAZWOPER TRAINING

OSHA 29 CFR 1910.120(q) regulations (the OSHA Standard) cover employees who are engaged in emergency response. It is important to distinguish the difference between an incidental and emergency spill. The following guidance is provided by OSHA regarding this distinction:

"An incidental release is a release of a hazardous substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up, nor does it have the potential to become an emergency within a short time frame. Incidental release are limited in quantity, exposure potential, or toxicity and present minor safety or health hazards to employees in the immediate work area or those assigned to clean them up. An incidental spill may be safely cleaned up by employees who are familiar with the hazards of the chemicals with which they are working."[1] "Incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of the release by employees in the immediate release area, or by maintenance personnel, are not considered to be emergency responses within the scope of the standard."[2]

[1] http://www.osha.gov/html/faq-hazwoper.html
[2] http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=24759

Most relatively small spills at our facilities, especially those not involving gasoline, qualify as incidental releases. Responders to such spills are not required to be HAZWOPER trained.

Employees that respond to emergency release sites must receive HAZWOPER training before they can participate in emergency operations. There are five levels of HAZWOPER training:

1st Responder Awareness Level – First responders at the awareness level are individuals that are likely to discover a spill and who have been trained to notify proper authorities of the release. They take no further action beyond notification.

1st Responder Operations Level – First responders at the operations level are individuals that respond for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They take defensive actions from a safe distance to contain an uncontrolled release to keep it from spreading and prevent exposures. They do not enter the danger area in attempt to stop a release.

Hazardous Materials Technician Level – Hazardous materials technicians are individuals who respond for the purpose of stopping the release. They will approach the point of the release in order to plug, patch, or otherwise stop the release. They have the potential to be in the hot zone.

Hazardous Materials Specialist Level – Hazardous material specialists provide support to hazardous material technicians. Their duties require more specific knowledge of the substances they are called upon to contain. This level of training does not apply to Colonial employees.

On Scene Incident Commander - Incident commanders assume control of the incident. They delegate responsibility for performing various tasks. Incident Commanders require more extensive training in general matters and in command/response management.

The table on page four identifies the minimal training requirements for the various positions of Colonial's incident command structure. Many of Colonial's emergency response positions (especially in the command center) will not require the individuals to work in areas where there is a safety or health threat. Such responders, with the exception of the incident commander, are not covered by the OSHA Standard if they will not enter the danger area. They must, however, understand their roles and responsibilities, the incident command structure, and Colonial's emergency response plan. The matrix also provides Colonial's training requirements, many of which exceed the minimum OSHA requirements. All Colonial employees with assigned emergency response roles besides administrative assistants shall receive initial training on the incident command system and emergency response (ICS/ER). This can be obtained by attending an 8 hour HAZWOPER classroom "refresher" training session.

REFRESHER TRAINING

All emergency response positions must attend annual refresher training to maintain required competency to perform their assigned responsibilities.

Individuals in positions covered by the OSHA Standard must complete the required 8 hour HAZWOPER refresher training within 12 months of the date the training was last taken. An employee who misses the 12 month date shall attend the next practicably available refresher class. If an employee does not complete refresher training by the end of the calendar year in which refresher training is due, he/she is subject to retake the 24 hour initial class. If, extenuating circumstances exist to prevent an employee from completing refresher training within the calendar year as prescribed, the HSS Leader will review a request for a waiver before an employee is required to retake the 24 hour initial HAZWOPER class. This waiver request would be on a case-by-case basis. Any decision about retraining would consider carefully that individual's previous levels of HAZWOPER training, actual experience, and demonstrated competence, to ensure they're able to perform their job absolutely safely. The decision will be documented and kept in the employee's file for three years.

For individuals in positions covered by the OSHA Standard, 8 hour annual HAZWOPER refresher training can be satisfied by attending a HAZWOPER classroom refresher training session.

Annual refresher training for positions that only require (ICS/ER) training can be satisfied by:

Attending a HAZWOPER classroom refresher training session.
Attending Strike Team classroom training.
Taking a web-based refresher training course in which there is a means to ascertain and document the individual's competency.

First Responder Awareness Level refresher training for non-administrative field personnel can be satisfied by the annual one-day safety class required for field personnel which includes awareness refresher curriculum.

FIREFIGHTING TRAINING

Firefighting training requirements to satisfy PHMSA 49 CFR 194.117 and 195.403 regulations depend on the emergency response position.

Portable fire extinguisher training will suffice for responders whose emergency response role has them assigned to the incident command center.

The following emergency response positions require the more in depth hands-on (includes simulator) type fire training:

All non-admin field personnel
Safety/Security Officer – Field
Staging Area Manager
Branch Director
Wildlife Unit Leader
Salvage/Source Control Unit Leader
Observer

TRAINING OPPORTUNITIES

Colonial offers a variety of emergency response training opportunities, including 24 hour HAZWOPER, 8 hour HAZWOPER awareness/operations/refresher, and fire training. Information on in-house training events can be obtained from the Learning Management System. There are also external training opportunities such as the “Inland Oil Spill Control Course” conducted by Texas A&M University. This course emphasizes control of oil spills on rivers, small streams, and land.

TRAINING RECORDS

Training records are maintained in the Learning Management System. These records are maintained for the term of employment for all Colonial personnel and are updated after satisfactory completion of training occurs. Individual training records can be accessed via Colonial’s intranet by Training Services personnel.

Colonial Pipeline Company

TRAINING

Emergency Response Position	Associated HAZWOPER Designation (if any)	OSHA Minimum Requirements		CPC Requirements	
		Initial	Refresher	Initial	Refresher
Incident Commander	Incident Commander	24 hrs – B&D	Yes	24 hrs – B&D	Yes
Government Liaison		NA	NA	ICS/ER	Yes
Safety/Security - Command	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
Safety/Security - Field	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
Public Information Officer		NA	NA	ICS/ER	Yes
Operations Chief		NA	NA	24 hrs - B	Yes
Staging Area Mgr		NA	NA	ICS/ER	Yes
Branch Director	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
Air Operations Unit Leader		NA	NA	ICS/ER	Yes
Wildlife Branch Leader		NA	NA	ICS/ER	Yes
Salvage/Source Control Unit Leader	1st Responder Operations	24 hrs - B	Yes	24 hrs - B	Yes
Operations Admin Assistant		NA	NA	NA	Yes
Planning Section Chief		NA	NA	24 hrs - B	Yes
Environmental Unit Leader	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
Situation Unit Leader		NA	NA	ICS/ER	Yes
Field Observer	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
GIS/Trajectory		NA	NA	ICS/ER	Yes
Resource Unit Leader		NA	NA	ICS/ER	Yes
Documentation Unit Leader		NA	NA	ICS/ER	Yes
Logistics Section Chief		NA	NA	ICS/ER	Yes
Food Unit Leader		NA	NA	ICS/ER	Yes
Support/Services Branch Leader		NA	NA	ICS/ER	Yes
Communications Unit Leader		NA	NA	ICS/ER	Yes
Logistics Admin Support		NA	NA	NA	Yes
Finance Chief		NA	NA	ICS/ER	Yes
Claims/Insurance/ROW Unit Leader		NA	NA	ICS/ER	Yes
All non-admin field personnel	1st Responder Awareness	A	Yes	A	Yes

NOTES

NA = Not Applicable
ICS/ER = Incident Command System/Emergency Response

Competencies:

A = Awareness Level

An understanding of what hazardous substances are, and the risks associated with them in an incident.
An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.
The ability to recognize the presence of hazardous substances in an emergency.
The ability to identify the hazardous substances, if possible.
An understanding of the role of the first responder awareness individual in the employer's emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.
The ability to realize the need for additional resources and to make appropriate notifications to the communication center.

B = 1st Responder Operations Level

Knowledge of the basic hazard and risk assessment techniques.
Know how to select and use proper personal protective equipment provided to the first responder operational level.
An understanding of basic hazardous materials terms.
Know how to perform basic control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available with their unit.
Know how to implement basic decontamination procedures.
An understanding of the relevant standard operating procedures and termination procedures.

C = Hazardous Materials Technician Level

Know how to implement the employer's emergency response plan.
Know the classification, identification, and verification of known and unknown materials by using field survey instruments and equipment.
Be able to function within an assigned role in the Incident Command System.
Know how to select and use proper specialized chemical personal protective equipment provided to the hazardous materials technician.
Understand hazard and risk assessment techniques.
Be able to perform advance control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available with the unit.
Understand and implement decontamination procedures.
Understand termination procedures.
Understand basic chemical and toxicological terminology and behavior.

D = Incident Commander
Know and be able to implement the employer's Incident Command System.

Know how to implement the employer's Emergency Response Plan.
Know and understand the hazards and risks associated with employees working in chemical protective clothing.
Know how to implement the local emergency response plan.
Know of the state emergency response plan and of the Federal Regional Response Team.
Know and understand the importance of decontamination procedures.

Colonial Pipeline Company
EXERCISE PROGRAM

Oil spill exercises and preparedness activities should be conducted in a manner consistent with the applicable PHMSA Part 194 and 195 regulations. Colonial's Emergency Preparedness and Response Program follows the triennial cycle set forth in the PREP (Preparedness for Response Exercise Program) guidelines. Description, scheduling, and documentation requirements for this program are listed below. Additionally, lessons learned from the exercises will be addressed and incorporated into future drills, exercises, and training. Exercise evaluations will include a review with personnel of their performance in meeting the objectives of the emergency response training program. The Director of Health, Safety, Security, and Environmental (Director HSSE) is responsible for planning, facilitating, and monitoring the exercise program(s) in conjunction with District/Response Zone Leadership.

INTERNAL NOTIFICATION EXERCISES

Objectives

Demonstrate the ability to contact the Qualified Individual(s) and other Spill Management Team members.

Requirements

Group 4 notification exercises will be conducted quarterly and consist of sending unannounced text messages and emails with the expectation that responders will call or email the Control Center to advise that they received the notification. At least one of the exercises per year will be conducted outside of normal business hours.
While not required, it is a good practice to also conduct quarterly Group 8 notification exercises for District response personnel.

Facilitation, Evaluation, and Certification

The Control Center Operations Manager (CCOM) will initiate Group 4 notification exercises, document the results, and send them to the Director of Health and Environmental (Director HSSE).
The Director HSSE will evaluate the results and certify the Group 4 notification exercises.
The District Administrative Assistant initiates Group 8 notification exercises, receives the responses, documents the results, and sends documentation to the Director of Operations for evaluation. The Group 8 results may be stored in the Spill and Drill Repository.

Documentation

Documentation will be retained electronically in the Spill and Drill Repository located on the Emergency Response SharePoint site for 3 years. The Environmental Coordinator (EC) manages this site.

EMERGENCY OPERATING PROCEDURE DRILLS

Objectives

Build proficiency in responding to abnormal and emergency conditions.
Demonstrate and develop consistency in the performance of routine operations.
Evaluate operational readiness and training needs.

Requirements

Expectations for these annual drills are contained in the Opex Drills and Preplanned Observations

section of the Conduct of Operations Manual.

Facilitation, Evaluation, and Certification

The Drill Coordinator as designated by the Operations Manager (OM) will facilitate the drills and perform post drill critiques with participants to determine the effectiveness of an Emergency Operating Procedure (EOP) that has been activated during a drill. The OM will evaluate and certify the exercises.

Documentation

The EOP exercise evaluation form contained in Section 7.02 is recommended for use
Documentation will be retained electronically in the Spill and Drill Repository for three years.
The OM ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.

DISTRICT SPILL MANAGEMENT TEAM TABLETOP EXERCISES

Objectives

District Spill Management Team members demonstrate their ability to organize, communicate, and make strategic decisions to protect human health and the environment, particularly during the initial stages of a response.
Demonstrate the ability to organize team members to effectively interface with a unified command.

Requirements

At least one tabletop exercise will be conducted by the District Spill Management Team each year.
The exercise should involve personnel for the positions identified in the district response team incident command structure (see Section 4.02).

Facilitation, Evaluation, and Certification

The District Environmental Manager (DEM) facilitates the exercise.
The response team conducts a post-exercise evaluation of the exercise to identify lessons learned and needed corrective actions.
The DEM ensures that corrective actions are entered into OPIS.
The Director of Operations (DO) certifies the exercise.

Documentation

ICS forms will be used during the exercise.
The exercise summary, evaluation, certification, and other relevant documentation generated will be retained electronically in the Spill and Drill Repository for three years.
The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
The DO ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.
Corrective Actions are entered and tracked in OPIS.

Objectives

Strike Team members demonstrate their knowledge of the contents of the ERP and the Planning Cycle process and their ability to apply them in a manner that would protect human health and the environment.

Demonstrate the ability to organize team members to effectively interface with a unified command.

Requirements

A tabletop exercise will be conducted by the Strike Team each year on a worst case type discharge scenario.
The scenario location will rotate each year such that the scenario is within each district once every three years.

Facilitation, Evaluation, and Certification

The Director HSSE facilitates the tabletop exercise.
The response team conducts a post-exercise evaluation of the exercise to identify lessons learned and needed corrective actions.
The Emergency Response Program Specialist ensures that corrective actions are entered into OPIS.
The Director HSSE certifies the exercises that engage both district and Strike Team responders.

Documentation

ICS forms will be used during the exercise.
The exercise summary, evaluation, certification, and other relevant documentation generated will be retained electronically in the Spill and Drill Repository for three years.
The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
The Director HSSE ensures the records are entered into the Spill and Drill Repository.
Corrective Actions are entered and tracked in OPIS.

EQUIPMENT DEPLOYMENT EXERCISES – COLONIAL EQUIPMENT

Colonial equipment is not used for responding to a worst-case discharge scenario. The equipment is intended to be used only for maintenance activities or to supplement OSRO equipment if needed.

EQUIPMENT DEPLOYMENT EXERCISES – OSRO EQUIPMENT

Objectives

To validate that the OSRO-owned equipment is appropriate for the operating environment in which it is intended to be used.
Operating personnel are trained and capable of its deployment and operation.

Requirements

A representative amount of OSRO equipment must be deployed annually. The OSRO must demonstrate its ability to deploy and operate the equipment. OSROs that have completed the required equipment deployment elsewhere do not need to be exercised by Colonial if we have adequate documentation of the completed exercises.

Facilitation, Evaluation, and Certification

The DEM facilitates the conduct of OSRO exercises at Colonial facilities, evaluation of the exercises for

lessons learned/corrective actions, and certifies such exercises.
The DEM ensures that corrective actions are entered into OPIS.
Where OSROs have fulfilled the equipment deployment elsewhere, either the relevant records from such exercises or a PREP-compliance certification from the OSRO shall be obtained by the Procurement Administrator.

Documentation

If an OSRO performs equipment deployment during a Colonial exercise, an electronic copy of the exercise summary, evaluation, certification, and other relevant documentation generated shall be entered into the Spill and Drill Repository for three years. The DEM ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.
OSRO PREP-compliance certifications or records from OSRO deployments elsewhere will be maintained for three years in the OSRO section of the Procurement SharePoint site.
Corrective Actions are entered and tracked in OPIS.

DISTRICT UNANNOUNCED EXERCISES

At least one tabletop or equipment deployment exercise in each district must be unannounced each year. This is not an additional exercise to the above described tabletop and equipment deployment exercises. An unannounced exercise is where the exercise participants do not have prior knowledge of the exercise, as would be the situation in an actual spill event.
Credit for an unannounced exercise can be taken for an actual spill that has been properly evaluated.

Facilitation, Evaluation, and Certification

The DEM facilitates the conduct of the exercise and its evaluation for lessons learned and corrective actions.
The DEM ensures that corrective actions are entered into OPIS.
The DEM certifies the exercise.

Documentation

The exercise summary, evaluation, certification, and other relevant documentation generated will be retained electronically in the Spill and Drill Repository for three years.
The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
The DEM ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.
Corrective Actions are entered and tracked in OPIS.

UNANNOUNCED, FULL SCALE, EQUIPMENT DEPLOYMENT DRILLS

Colonial may elect to periodically conduct an unannounced, full scale drill that includes equipment deployment with the purpose of testing the ability to exercise the entire emergency response plan using an as near to real life scenario as possible. These drills include actual notification, mobilization, and deployment of appropriate Colonial and OSRO equipment and resources necessary to respond to the scenario in question. Additionally, the Atlanta Control Center may conduct a mock shut down of the affected pipeline segment. These drills would be designed to meet the criteria of both "Unannounced"

and "Triennial" drill requirements exercising all fifteen elements of the PREP guidelines.

Facilitation, Evaluation, and Certification

The Emergency Response Program Specialist facilitates the conduct of the exercise and its evaluation for lessons learned and corrective actions.
The Emergency Response Program Specialist ensures that corrective actions are entered into OPIS.
The Director HSSE certifies the exercise.

Documentation

The exercise summary, evaluation, certification, and other relevant documentation generated will be retained electronically in the Spill and Drill Repository for 3 years.
The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
The Emergency Response Program Specialist ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.
Corrective Actions are entered and tracked in OPIS.

AREA EXERCISES/UNANNOUNCED PHMSA EXERCISES

Colonial will participate in Area Exercises as requested by the "Initiating Authorities" (Federal, State, and Local Government, and Industry). These will be managed by the Director of Operations or Director HSSE.

CREDIT FOR ACTUAL SPILL RESPONSES

Credit may be taken for actual responses to satisfy the requirements of the District Spill Management Team tabletop exercise, Strike Team tabletop exercise, or an equipment deployment exercise if the following conditions are met:

District Spill Management Team tabletop exercise
An ICS structure is established with the relevant positions filled.
An Incident Action Plan is prepared.
A post response evaluation is conducted and documented.

Strike Team tabletop exercise
A significant volume of oil is spilled and/or there is a significant environmental threat.
An ICS structure is established.
The Strike Team is mobilized.
An Incident Action Plan is prepared.
A post response evaluation is conducted and documented.

Equipment Deployment
The minimum amount of Colonial or OSRO equipment is deployed.
A post response evaluation is conducted and documented.

Certification

The Incident Commander for the actual response must certify that the response meets the credit requirements for the identified exercises and plan components.E

Documentation

The Post Emergency Response Review – Significant Spill or Exercise form contained in Section 4.04.1 or equivalent must be completed.
For equipment deployment credit, the Equipment Deployment Exercise Evaluation form contained in Section 7.02 must be completed.
An electronic copy of the exercise summary, evaluation, certification, and other relevant documentation generated shall be entered into the Spill and Drill Repository and retained for three years.
The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
The Incident Commander ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository. Corrective Actions are entered and tracked in OPIS.

TRIENNIAL CYCLE

The above defined frequency of exercises will meet the PREP triennial cycle requirements. Each of the following 15 components of the response plan must be exercised at least once during the rolling three year cycle:

Notification.
Staff mobilization.
Ability to operate within the response management system of the ERP.
Discharge control.
Assessment of discharge.
Containment of discharge.
Recovery of spilled material.
Protection of sensitive areas.
Disposal of recovered material and contaminated debris.
Communications.
Transportation.
Personnel support.
Equipment maintenance and support.
Procurement.
Documentation.

The Triennial Cycle Documentation Form that is to be completed for each district is contained in Section 7.02.

CERTIFICATION REQUIREMENTS

Proper documentation for self-certification for each exercise should include the:

Type of exercise.
Date of exercise.
Description of the exercise.
Objectives met in the exercise.
Components of the response plan exercised.
Components of the fifteen PREP components exercised.
Lessons learned.

The document must be “signed” by the individual authorized above for each type of exercise. Documentation forms are contained in Section 7.02. Signing can consist of the authorized person entering his/her name and positioning it on the electronic document.

Colonial Pipeline Company
EXERCISE DOCUMENTATION

All notification, tabletop, and equipment deployment exercises must be documented, evaluated, and self-certified to ensure all objectives have been met. The documentation is to be maintained in the Drill and Spill Repository located in the Emergency Response SharePoint site for three years. Hard copy documentation should be retained at least until it is verified that all information has been stored in the Drill and Spill Repository. Contained in this section are copies of the following forms that are to be used in order to provide adequate documentation to meet the regulatory requirements:

Internal Notification Exercises
Emergency Operating Procedure Exercise Evaluation
Post Tabletop Exercise Evaluation
Equipment Deployment Exercise
Triennial Cycle Documentation

The electronic version of each of these forms can be accessed via the link on the Emergency Response Plan SharePoint site. The Triennial Cycle Documentation spreadsheet for each Response Zone should be completed appropriately for each exercise during the three year cycle.

Colonial Pipeline Company

TRIENNIAL CYCLE DOCUMENTATION

Triennial Cycle Documentation Form

_____ Response Zone

Compliance Cycle: 2016 - 2018

	Exercise Category						Core Components														
	QI Notification	Emergency Procedures	SMT Tabletop	Equipment Deployment	Gov't Unannounced	Full Scale	Notification	Staff Mobilization	Operate in RMS	Discharge Containment	Assessment	Containment	Recovery	Protection	Disposal	Communications	Transportation	Personnel Support	Equipment Maintenance	Procurement	Documentation
2016																					
1st Qtr.																					
2nd Qtr.																					
3rd Qtr.																					
4th Qtr.																					
2017																					
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3rd Qtr.																					
4th Qtr.																					

For each quarter in which an exercise was completed, mark the exercise category with an "x", then mark each core component(s) tested during the exercise with an "x".

All information related to a given exercise should be stored in the Drill and Spill Repository located on the Emergency Response SharePoint site in accordance with the documentation plan (See ERP Section 7.01).

Colonial Pipeline Company

INTERNAL NOTIFICATION EXERCISE DOCUMENTATION – GROUP 4

Internal Notification Exercise - Group 4					
Date/time notification initiated:					
Learnings/corrective actions required:					
Strike Team					
Name	**Respond w/in 15 minutes**	**Respond to 15 minute follow up**	**Back up called**	**Back up respond**	**Notes**
Non Primary					
Name	**Respond w/in 15 minutes**	**Respond to 15 minute follow up**	**Back up called**	**Back up respond**	**Notes**
Certification that the objectives of internal notification exercise have been met.					
Name:					
Date:					

Colonial Pipeline Company
POST TABLETOP EXERCISE EVALUATION

(Provide an explanation for answers that are not affirmative)

Date:
Location:
Attach listing of participants
Description of scenario:

Significant difficulties encountered during this response? (If yes, briefly describe)

Lessons learned:

Areas for improvement:

Corrective actions to be taken (also enter corrective actions into OPIS):

CORE RESPONSE COMPONENTS EVALUATION
(Provide an explanation for answers that are not affirmative.)

Notifications
Test the notifications procedures identified in the ERP.

Were required federal, state, and local agency notifications completed in a timely manner?
Were spill management team call-out procedures effectively executed?
Were notifications and responses properly documented?
Were shippers notified as appropriate?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute notification procedures?

2) Staff Mobilization
Demonstrate the ability to assemble the spill response organization identified in the ERP.

Was an initial Strike Team conference call effectively initiated within an hour?
Was there adequate coverage in key positions by Colonial and contractor to mount an acceptable initial response?
Did we utilize pre-determined command center and staging locations?
Was the command center adequately equipped?
Were adequate directions provided for those unfamiliar with the area to find the command center and staging area?
Did personnel initially report through Staging if not members of the IC?
Were there effective transitions when initial responders were relieved by pre-assigned personnel?
Any changes need to be made to current procedures being used or the ERP?

3) Ability to Operate Within the Response Management System Described in the ERP
Demonstrate the ability of the Spill Management Team work within the Incident Command System as defined in the response plan to effectively address the event.

<u>Initial Response Management</u>

Were appropriate emergency shutdown actions taken by the control center and/or local operations in a timely manner?
Did initial responders perform a thorough initial assessment and size-up of the incident (e.g., spill volume, product type and hazards, including consideration of environmental conditions.)?
Was an acceptable Site Safety & Health Plan quickly developed and implemented in the field?
Were Initial Strategic Objectives quickly identified and implemented?
Was an effective Unified Command established?
Were initial responders familiar with their responsibilities?
Comments/Lessons Learned/Recommendations.

Incident Command Staff

Was staff familiar with the ICS Planning Cycle and able to effectively apply it?
Did the staff develop and prioritize overall incident objectives and assess if current and planned actions were consistent with those objectives?
Did the staff establish operational periods, meeting schedules, and approve an IAP?
Did the Incident Commander establish a link with CMT/Situation Room in Alpharetta office, complete the Spill Situation Status Summary and Crisis Management Assumed Consequences forms, and set up a communication cycle to keep appropriate information flow between IC and CMT?
Did the incident commander effectively delegate duties?
Was there good information flow within and between sections?
Was there adequate administrative support?
Were there enough adequately trained (HAZWOPER and functionally proficient) internal and contractor personnel to fill the required positions for two shifts for a sustained response?
Was a shift change schedule established and was there an effective plan for making the transitions?
Were effective briefing meetings held at appropriate intervals?
Comments/Lessons Learned/Recommendations.

Safety
Demonstrate the ability to monitor all field operations and ensure compliance with safety standards.

Were field operations adequately monitored to ensure compliance with safety standards, especially with respect to proximity of pipeline repair and recovery activities to water?
Was a Site Safety & Health Plan prepared and updated?
Were pre-work safety briefings held at all work sites?
Were safety zones established?
Were safety and health hazards adequately assessed to plan for effective protection?
Comments/Lessons Learned/Recommendations.

Operations
Demonstrate the ability to coordinate or direct operations related to the implementation of action plans.

Were tactical assignments appropriate to the overall incident objectives and strategies?
Was there effective coordination with Planning, Staging, and Logistics Sections to develop resource status tracking and documentation?
Was a communications schedule established at all recovery sites to report on progress and issues encountered that need attention?
Were sufficient personnel available to effectively manage all field operations?

Comments/Lessons Learned/Recommendations.

Planning
Demonstrate the ability to develop short-range tactical plans for the operations section and specific long-range strategic plans.

Was an incident action plan effectively developed using the IAP forms?
Was an appropriate meeting schedule established to prepare the action plan?
Was the Command Post Situation Display prepared and maintained?
Was a master list of all resources checked in at incident including check-in, status, current location, estimated time of deployment, etc. maintained?
Were the spill response activities (i.e., utilizing a historian, use of proper forms, etc.) adequately documented?
Comments/Lessons Learned/Recommendations.

Logistics
Demonstrate the ability to provide the necessary support of both short-term and long-term action plans.

Was there effective integration of Logistics, Staging, and the Resource Unit sections?
If Logistics did not immediately mobilize to the command center was there a smooth transition planned for when the move was made to join the command center?
Comments/Lessons Learned/Recommendations.

Finance
Demonstrate the ability to document the daily expenditures of the organization and provide cost estimates for continuing operations.

Was a claims phone number posted and processing system established?
Were daily committed cost estimates documented and provided to IC?
Was it confirmed that all contractors responding had valid contracts with CPC?
Were contracts promptly established/adjusted for contractors without valid contracts?
Was it quickly determined if a third party cost monitoring contractor was needed?
Comments/Lessons Learned/Recommendations.

Public Information/Liaison
Demonstrate the ability to form a joint information center and provide the necessary interface between unified command and the media.

Was an initial press release issued within an appropriate time frame?
Was a protocol established for authorizing release of information to media?
Was a schedule prepared for regular progress reports on the spill cleanup efforts to be distributed to local officials, citizens, and the media?
Were email updates on response progress prepared for employees?
Comments/Lessons Learned/Recommendations.

4) Source Control
Demonstrate the ability of the spill response organization to control and stop the discharge at the source.

Was the spill location confirmed in a timely manner?
Were control measures effectively executed to stop/minimize the discharge at the source (effective

station shut-down and valve closures)?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute source control procedures?

5) Assessment
Demonstrate the ability of the response organization to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of tactical operations.

Were weather and trajectory information obtained/determined?
Were estimates of initial spill volume and potential drain down determined?
Were recon teams (ground and air) dispatched in a timely fashion and did they provide needed information to Planning to identify effective recovery locations?
Were NRDA implications considered and acted upon to collect time sensitive information?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute assessment procedures?

6) Containment
Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations.

Were timely/effective actions taken to minimize product from entering creek?
Was the “last stand” recovery point identified and boom deployed in advance of the product leading edge?
Was there sufficient equipment available for all containment sites?
Did contractors demonstrate adequate expertise in booming strategy and timely deployment?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute containment procedures?

7) Recovery
Demonstrate the ability of the response organization to recover, mitigate, and remove the discharged product.

Were skimmers adequately deployed and operational?
Was there adequate on-site storage capacity available (vac trucks, tank trucks, frac tanks) to accommodate recovered volumes?
Were arrangements made to provide adequate offloading capabilities and off-site storage capacity to hold recovered product?
Were there appropriate means to track volume of recovered product and distinguish between volume discharged from the environment and volume collected from the pipe?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute recovery procedures?

8) Protection
Demonstrate the ability of the response organization to protect the environmentally and economically sensitive areas identified in the ACP and ERP.

Were sensitive areas identified and prioritized?
Did action plan adequately address protective booming strategies?
Were potentially affected water intakes quickly identified and were measures taken to provide appropriate

protection?
Were wildlife protection areas at risk identified and were effective protective measures included in the action plan?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute protection procedures?

9) Disposal
Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.

Was an adequate waste minimization plan (i.e. segregation of contaminated soil/debris) prepared?
Was an adequate waste disposal plan prepared?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute waste management procedures?

10) Communications
Demonstrate the ability to establish an effective communications system for the spill response organization.

Were there adequate communications capabilities available between the incident command center, recon, staging, logistics (if off-site), containment/recovery sites, and Alpharetta situation room?
Did the command center have adequate internet access?
Did command center and staging make arrangements to acquire hard-wired phones?
Were satellite phones brought to the site and were they ready for use?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute communication procedures?

11) Transportation
Demonstrate the ability to provide effective transportation to facilitate response activities.

Was thought given to traffic flow and how to integrate support from local authorities?
Was the acquisition of required road permits for heavy equipment and supplies adequately addressed?
Comments/Lessons Learned/Recommendation.

12) Personnel Support
Demonstrate the ability to provide the necessary support of all personnel with the response.

Was there adequate overnight accommodations provided for on a continuing basis for a sustained response?
Were suitable feeding arrangements made for response personnel?
Were emergency services for response personnel made available?
Were adequate portable toilets facilities mobilized?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute support procedures?

13) Equipment Maintenance & Support
Demonstrate the ability to maintain and support all equipment associated with the response.

Were there adequate capabilities provided to maintain response equipment?
Are personnel adequately trained to successfully execute maintenance procedures?
Comments/Lessons Learned/Recommendations

14) Procurement
Demonstrate the ability to establish an effective procurement system to obtain the necessary personnel, equipment, and supplies for a sustained response.

Were needed equipment and supplies secured in a timely manner?
Was a linkage established with corporate Procurement to provide assistance for difficult to obtain items?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute procurement procedures?

15) Documentation
Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

Did we record the salient information?
Were the appropriate ICS forms completed?
Any changes need to be made to current procedures being used or the ERP?
Are personnel adequately trained to successfully execute documentation procedures?

Certification
I certify that the objectives of this exercise were met.

_____	_____	_____
Name	Signature	Date

2/23/10

Colonial Pipeline Company

EQUIPMENT DEPLOYMENT EXERCISE EVALUATION

Date:

Location:

Type of event (exercise or actual response):

Announced or unannounced:

Description of scenario:

Deployment location(s):

Attach listing of participating OSRO/contractor and Colonial personnel.

Attach listing of equipment deployed.

Was at least the minimum amount of required deployed?

Was equipment in good operating condition?

Overall execution performance of personnel deploying and managing the equipment deployment:

Significant difficulties encountered during the exercise? (if yes, briefly describe)

Lessons learned:

Areas for improvement:

Corrective actions to be taken (also enter corrective actions into OPIS):

Exercise Objectives Met? (yes/no)

Certifying individual and date:

This record is to be maintained in the Emergency Response SharePoint site.

Colonial Pipeline Company

EQUIPMENT DEPLOYMENT EXERCISE – PARTICIPANTS

Date:		
Location:		
Name	**Company**	**Emergency Response Position**

Colonial Pipeline Company

EQUIPMENT DEPLOYMENT EXERCISE – EQUIPMENT LISTING

Date:		
Location:		
Equipment Description	**Amount**	**Owner (Name of OSRO, Contractor, or Colonial)**

Colonial Pipeline Company

EMERGENCY OPERATING PROCEDURE (EOP) EXERCISE EVALUATION

Date:

Location:

Description of scenario:

EOP(s) activated:

K01 – Leak K02 -Tank Overflow K20 -Evacuation K30 – Complete Loss of Communication K40 – Natural Disasters K50 – Fire or Explosion K60 – Security Threat

Were all immediate and subsequent actions identified in the EOP performed (yes or no)?

Overall effectiveness of the EOP:

Overall execution of personnel performing the EOP:

Significant difficulties encountered during the response? (if yes, briefly describe):

Lessons learned:

Areas for improvement:

Corrective actions to be taken (also enter corrective actions into OPIS):

Exercise Objectives Met? (Yes/No)

Certifying individual and date:

Colonial Pipeline Company

PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

The Emergency Response Plan for each Response Zone will be reviewed and updated as necessary, at a minimum of once every **five years** to reflect any changes in operations that would affect Colonial's response organization. These revisions will be submitted to PHMSA for approval within thirty (30) days from the date of the revision.

Additionally, the plan will be revised if any of the following should occur:

Extension of an existing pipeline, construction of a new pipeline, or purchase of pipeline in an area not covered under the existing Response Plan.
Relocation or replacement of a pipeline segment that would affect the information contained in the Response Plan.
Changes in the type of product transported, if it would affect the type of response efforts described in the existing plan.
Changes in either Colonial or contract resources that would adversely affect response efforts
Changes in emergency response procedures or organization.
Changes in either the National Contingency Plans or applicable Area Contingency Plans.
Changes to the job title or position of the Director of Operations, which is by definition a "Qualified Individual".
Ownership change.
Change in worst case discharge scenarios.

These response plans have been developed for use in the three Colonial Pipeline Company Response Zones and much of the information included is facility or Response Zone specific. The distribution and control procedures of the Plan are described in detail in *Section 8.02, Document Control Procedures*. It is the responsibility of the Director of Operations to ensure that all emergency contact telephone numbers and ICS organization charts are accurate. In addition, the District Project Leader, or his designee, will ensure that the oil spill response organization's (OSROs) data are accurate.

It is expected that the plan will be reviewed and updated annually due to personnel changes and continuous improvements in communication processes. At a minimum, the appropriate personnel will review the Plan for accuracy and completeness. Upon such review, the appropriate personnel will certify that he/she reviewed the plan and submitted the necessary changes and/or noted no changes need to be made. The form to be used for the review certification follows the updating responsibility chart below.

Changes in a Director of Operations requires immediate notification to the Director Health, Safety, Security, and Environmental. PHMSA will be notified within thirty days of changes in a Director of Operations since they are identified in the Plan as a Qualified Individual.

The District Environmental Manager, Operations Manager, District Project Leader, or Director of Operations, must immediately notify the Director Health, Safety, Security, and Environmental if their contact information changes.

In addition, the District Administrative Assistants will update the following Sections of the Plan and notify response personnel within thirty days of a change in an Operations Manager, a District Project Leader, a District Environmental Manager, or a Director of Operations, (including contact information).

Section 2.03 Emergency Notification Flowchart
Section 4.02 Incident Command System and Structure (if applicable)

Oil Spill Notification and Air Pollution Control Device Malfunctions are to be updated each year by the

Environmental Coordinator. This documentation is located in Corporate Procedure 30.

The review and update of the OPA 90 portions of this ERP is the responsibility of the Environmental personnel assigned to the task of emergency preparedness coordination, which may vary depending on Response Zones. Post-drill and post-incident evaluations will be conducted to identify the need to incorporate changes into Colonial's response procedures.

This Plan is the guidebook for all of Colonial's spill response actions. It will be amended as needed based on the learnings gained from exercises and/or actual responses to spills. Consequently, reviewing and critiquing Colonial's field response activities can also improve the Plan.

PLAN ACCOUNTABILITIES

Individual Responders

Understand your assigned emergency response roles and responsibilities and obtain necessary training to be able to proficiently perform these duties.
Ensure access to an updated Emergency Response Plan.
Actively participate in annual HAZWOPER refresher training.
Participate in tabletop drills and other exercises, as required.
Update the People Soft database if there are changes in your contact information.
Obtain response equipment required for pre-assigned position(s), maintain it in good working order (e.g. LEL meter, flashlight, etc.), and have it readily available for use.

Director of Operations/Qualified Individuals

Keep Response Zone Incident Command System organizational structure up to date.
Ensure Response Zone spill management and response teams are adequately trained to respond to an emergency.
Ensures the Group 8 Notification List is maintained and approves any additions or deletions to Group 8 Notification List.
Conduct periodic notification tests, tabletops exercises, and/or equipment deployment drills to ensure district response team is prepared to promptly and effectively respond to emergencies (coordinate activities with the Environmental Coordinator for documentation and compliance tracking).
Ensure the district has an adequate cadre of approved spill response contractors under contract and vendors to supply the needed personnel and equipment resources to effectively manage a worst case discharge for the district (coordinate OSRO verification and approval with the District Project Leader).
Develop and maintain a positive working relationship with key response contractors.
Ensure all employees within the district with emergency response duties attend annual HAZWOPER refresher training.
Ensure Response Zone Emergency Response Plan is kept up to date.
Ensure post exercise and actual response critiques are promptly conducted and that all action items assigned to district personnel are completed.

District Project Leaders

Ensure all Colonial spill response equipment, including communications equipment, is maintained in good working condition and that appropriate supplies are adequately stocked.
Ensure direct reports with assigned emergency response duties attend annual HAZWOPER refresher training and that they have received adequate training to perform their assigned duties.

Ensure all direct reports are trained in, and capable of, executing the emergency notification procedures.
Develop and maintain a positive working relationship with response contractors.
Ensure latest versions of maps (alignment sheets, USGS quadrangles) are readily available.
Maintain PHMSA required documentation for non-USCG approved oil spill response contractors (OSROs) included in our Emergency Response Plan Section 5.05 (coordinate with the Environmental Coordinator).

Operations Managers

Ensure direct reports with assigned emergency response duties attend annual HAZWOPER refresher training and are adequately trained to respond to an emergency.
Make certain that all direct reports are trained and capable of executing the emergency notification procedures.
Participate in periodic notification tests, tabletops exercises, and/or equipment deployment drills to ensure local responders are prepared to promptly and effectively respond to emergencies (coordinate with the Director of Operations and the Environmental Coordinator.
Make sure that local information contained in the Emergency Response Plan is kept up to date.
Develop and maintain a positive working relationships with oil spill response contractors and local emergency response agencies.

District Environmental Managers

Provide guidance on state spill notification requirements (coordinate with the Environmental Coordinator).
Ensure direct reports with assigned emergency response duties attend annual HAZWOPER refresher training and that they have received adequate training to competently perform their assigned duties.
Ensure all direct reports are trained in, and are capable of, executing the emergency notification procedures.

Director of Health, Safety, Security, and Environmental

Keep track of any relevant changes to spill response regulations, communicate changes to affected personnel, and ensure appropriate amendments are made to Emergency Response Plan to maintain regulatory compliance.
Ensures the Group 4 Notification List is maintained and approves any additions or deletions to Group 4 Notification List.
Maintain positive working relationship with PHMSA representatives who administer regulatory compliance program for pipelines.
Ensure PHMSA required corporate notification and spill drills are conducted.
Ensure appropriate auditing is conducted to identify and correct compliance gaps.
Ensure direct reports with emergency response duties attend annual HAZWOPER refresher training as required and that they have received adequate training to competently perform their assigned duties.

Environmental Coordinator

Ensure proper maintenance of the electronic version of the Emergency Response Plans.
Coordinates with the Director Health, Safety, Security, and Environmental to ensure the Group 4 Notification List is revised and updated as necessary.
Coordinate with each Response Zone to track compliance activities and associated documentation (Coordinate with Director of Operations and Operations Managers).
Coordinate with the Director Health, Safety, Security, and Environmental to ensure that compliance

requirements are met and that the response plans are revised and updated as necessary.

All Supervisors

Ensure direct reports with emergency response duties receive training needed for them to competently perform their assigned roles and that appropriate personnel attend annual HAZWOPER refresher training.
Ensure direct reports who have emergency response responsibilities have access to an updated Emergency Response Plan.
Ensure prompt consideration of emergency response and notification duties for new reports and that necessary training is provided.

Administrative Staff Assigned ERP Update Responsibilities

Coordinate as necessary with the Environmental Coordinator to ensure updates are communicated and implemented properly.

Spill Management Team Members

Ensure access to an updated Emergency Response Plan.
Actively participate in annual HAZWOPER refresher training, Spill Management Team training, and attend other training as needed to maintain competency in assigned duties.

UPDATING TABLE

Please refer to this table to identify your areas of responsibility for updates to this document.

ERP Update Responsibilities

Owner	Section	District/Generic	Contents
Director of Operations	1.05	District	Certification
Director of Operations	1.06.01,2,3	District	Worst case discharge
Director of Operations	4.02	District	ICS structure
District Administrative Coordinator	1.02	District	Information summary
District Administrative Coordinator	1.03	District	Response zone maps & line segments
District Administrative Coordinator	5.03	District	District employee phone list
District Administrative Coordinator	5.04	District	Other federal, state, & local agencies
District Corrosion Project Manager	9.04	District	Rectifier locations
District Environmental Manager	5.07	District	Environmental contractors
District Environmental Manager	5.08	District	Aerial recon contractors
District Environmental Manager	9.02	District	Release response strategies
District Environmental Manager	9.06	District	Water intake locations
District Logistic Section Chiefs	5.13	District	Local Emergency Care Facilities
District Logistics Section Chiefs	5.09	District	Other response equipment suppliers
District Logistics Section Chiefs	5.10	District	Vendor support supplies
District Logistics Section Chiefs	5.11	District	Airports & FBOs
District Project Leader	1.06.04	District	Minimum response resources
District Project Leader	4.03.04	District	Responsibility checklist – Operations
District Project Leader	5.05	District	OSROs
District Project Leader	5.06	District	Pipeline repair contractors
Emergency Response Program Spec	9.05	District	Environmentally sensitive areas
Environmental Coordinator	1.00	Generic	Table of Contents
Environmental Coordinator	1.01	Generic	Purpose & consistency with other cont plans
Environmental Coordinator	1.04	Generic	Significant & substantial harm determination
Environmental Coordinator	1.06	Generic	Worst Case Discharge - Introduction
Environmental Coordinator	1.06.01	Generic	Worst Case Discharge - Tankage
Environmental Coordinator	2.01	Generic	Notification and Mobilization Procedures
Environmental Coordinator	2.02	Generic	Communication Methods and Equipment
Environmental Coordinator	2.04	Generic	Crisis Management Communication
Environmental Coordinator	3.01	Generic	Leak detection & emergency procedures
Environmental Coordinator	4.01	Generic	Initial roles & responsibilities

Colonial Pipeline Company

PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

Owner	Section	District/Generic	Contents
Environmental Coordinator	4.03.01	Generic	Responsibility checklist – Common ICS Responsibilities
Environmental Coordinator	4.03.02	Generic	Responsibility checklist - Command
Environmental Coordinator	4.03.03	Generic	Responsibility checklist - Finance
Environmental Coordinator	4.03.04	Generic	Responsibility checklist - Operations
Environmental Coordinator	4.03.05	Generic	Responsibility checklist - Planning
Environmental Coordinator	4.03.06	Generic	Responsibility checklist - Logistics
Environmental Coordinator	4.04.00	Generic	Post Emergency Response Reviews
Environmental Coordinator	4.04.01	Generic	Post Emergency Response Reviews – Significant Spill
Environmental Coordinator	5.01	Generic	Spill Management Team contact phone list
Environmental Coordinator	5.02	Generic	HAZWOPER trained personnel
Environmental Coordinator	5.14	Generic	USCG Captain of the Ports contacts
Environmental Coordinator	6.01	Generic	Training courses & requirements
Environmental Coordinator	7.01	Generic	Exercise program
Environmental Coordinator	7.02	Generic	Exercise documentation
Environmental Coordinator	7.02.01	Generic	Triennial cycle documentation spreadsheet
Environmental Coordinator	7.02.02	Generic	Internal notification exercise documentation - Group 4
Environmental Coordinator	7.02.03	Generic	Post tabletop exercise evaluation
Environmental Coordinator	7.02.04	Generic	Equipment deployment exercise evaluation
Environmental Coordinator	7.02.05	Generic	Equipment deployment exercise - Participants
Environmental Coordinator	7.02.06	Generic	Equipment deployment exercise - Equipment
Environmental Coordinator	7.02.07	Generic	Emergency operating procedures exercise evaluation
Environmental Coordinator	8.01	Generic	Response plan review, update procedures accountability
Environmental Coordinator	8.02	Generic	On-line usage & document control procedures
Environmental Coordinator	9.02	Generic	Response strategies
Operation Managers	2.03	District	Emergency notification flow charts
Operation Managers	5.12	District	Local terminal mgrs & adjacent pipelines
Technical Services/GIS	9.03	Generic	Block valve locations
Safety & Security Leader	9.01	Generic	Product characteristics & SDS Sheets

Colonial Pipeline Company

PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

Emergency Response Plan
Annual Review Acknowledgement Form

This form or equivalent must be completed and returned to the District Administrative Coordinator along with any applicable updates. This form will be maintained by the District Administrative Coordinator until the next update. The District Administrative Coordinator will have the responsibility of recording the date of receipt in the appropriate at the bottom of this form.

The Environmental Coordinator shall complete this form or equivalent for the generic section of the Emergency Response Plan.

I hereby acknowledge that I have reviewed the sections of Colonial Pipeline's Emergency Response Plan for which I am held accountable for updating as identified in ERP Section 8.01.

Effective ERP Update Date (month/year):_____

Section Number	Changes Submitted	No Changes Necessary

(Please list each section for which you are held accountable for updating in the "Section Number Column." For each section; you are held accountable, place a check mark in either the "Changes Submitted" column or the "No Changes Necessary" column.

Name:_____

Title:_____

Date:_____

For District Office Use Only *(to be completed by the District AA)*
Date Received

Colonial Pipeline Company
DOCUMENT CONTROL PROCEDURES

The Emergency Response Plans contained within the ERP SharePoint site are the official manuals for each Response Zone and supersede any printed copy.

The Environmental Team maintains the Emergency Response Plans for all Response Zones. Any questions or concerns regarding any document contained within this SharePoint site should be directed to the Environmental Team.

All original documents are archived in the ERP SharePoint Site. Editing these documents will require them to be checked out. Please note that these documents are only accessible by the Director of Health, Safety, Security, and Environmental, the Environmental Coordinator, or his/her designee. The documents displayed in this SharePoint site are Adobe Acrobat files created from these original documents.

In the event that all or part of an ERP has been revised the following events shall occur:

Upon completing a revision to an original ERP document an Adobe file will be created to replace the one posted on the ERP SharePoint site. Note that revision data appears in the footer of all documents declaring the month and year of the latest revision. The Environmental Coordinator is the web-master for this site and will coordinate replacing documents.
The original ERP document will be checked back into the Environmental SharePoint site immediately upon completion of the above step.

If significant revisions are made to the ERP (as described in *Section 8.01, Response Plan Review, Update Procedures, and Accountability*) the following events shall occur in addition to the above-mentioned actions:

If warranted, an updated copy of the complete ERP shall be submitted to the Pipeline and Hazardous Materials Safety Administration (PHMSA) for approval within thirty days of the revisions.
After the SharePoint site has been properly updated an e-mail will be sent to all employees stating the following:
Section No. and document name affected.
A summary of the revisions made.
A revision history will be maintained and made available on the SharePoint site. This document will begin with the date the ERP was introduced on-line and will continue forward.

Hardcopy updates will no longer be disseminated from the Environmental Team. Therefore it is the responsibility of the individual employee to maintain and update any hardcopies of the ERP in his/her possession. Any hardcopies not properly maintained should be discarded to avoid inadvertent use of misleading or outdated information during an emergency response.

To ensure regulatory compliance as stipulated under 49 CFR 194.111 each Operations Manager must make certain that the ERP is available at each facility. This can be accomplished by performing one or more of the following:

Downloading to at least one station computer your Response Zone's ERP. This will ensure that the information is accessible even if the network is not.
Printing a copy of your Response Zone's ERP and placing it in an easily accessible location.

Store an electronic copy of the ERP on a media that can be read from the facilities computer (i.e. CD-ROM, ZIP Disk, External hard drive, etc.). This media must be stored in a conspicuous location and labeled as:

Emergency Response Plan
(District Name) Response Zone
(date of last revision)

Select employees must have a copy of the ERP in their custody. Others are strongly encouraged to maintain a copy (hardcopy or electronic) of the ERP in the event of a drill or actual incident. Those required to maintain a copy of the ERP are:

Director of Operations
Operations Managers (e.g. Tank Farms, Stations and Facilities that are under your supervision)
Director of Health, Safety, Security, and Environmental

Those recommended to maintain a copy of the ERP are:

Operations Managers and Associate OM's
Project Leaders
Project Managers and Associate PM's
ROW Team
Safety Team
Corrosion Team
Environmental Team
Sr. Controller (Atlanta Office)

When significant changes are made to the ERP those listed above will be asked to reply to an e-mail notification acknowledging that the changes to the documents have been received and confirming that copies within their custody have been updated.

Colonial Pipeline Company

OIL AND GASOLINE SPILL BEHAVIOR ON LAND, WATER

The ability to predict how a product spill behaves on land or water can increase efficiency of control, containment, and recovery action. An understanding of the characteristics of petroleum products is essential for these purposes. Three major types of refined petroleum products are shipped in the Colonial Pipeline system. These include gasoline, kerosene, and No. 2 fuel oil.

The possibility of fire is one of the first concerns in a spill situation. The flash point of a product is the minimum temperature at which the product will ignite when it comes in contact with an open flame or spark.

FLASH POINT OF REFINED PRODUCTS

Product	Minimum Flash Point Range, F
Gasoline	Ambient Temperature
Kerosene	113-123
No. 2 Fuel Oil	125-140
JP-8	100-200

Kerosene and No. 2 fuel oil are comparatively safer to handle than gasoline. HOWEVER, STRINGENT SAFETY MEASURES SHOULD BE OBSERVED WITH ANY SPILL.

Contamination of water is also a prime consideration. Refined products contain fractions that are soluble in water. These fractions are offensive to taste and smell and make water undesirable for domestic use. Long before oil contaminated water reaches toxic levels, people will usually refuse to drink it due to its bad taste and odor. However, livestock may continue to drink it.

IMMEDIATE MEASURES

Contain the escaping product and accomplish the line repairs as quickly as possible, with safety foremost in mind. This concern for safety is not only for those at work in the area but also for anyone who may be in the area for other reasons. Where there is danger of third party ignition sources, the following should be enforced:

Refined product vapors are heavier than air. Vapor testers are required on site and should be used until the area is safe and free of vapors. Never approach a hazardous area from a lower level or from the downwind side. If the wind changes, cease all work and shut down equipment until the area is free of vapors.

Keep equipment with internal combustion engines on the windward side of leak site or containment area and at a safe distance.

Fire extinguishers and first aid equipment should be readily available.

Take necessary steps to warn or stop all traffic (foot, motor, or rail) in the hazardous area. Residents in the hazardous area should be warned or evacuated. If necessary, contact local or state law enforcement officials and fire departments to seal off the area and ensure that pilot lights and any other hazardous appliances or equipment are turned off and rendered non-operable.

Colonial Pipeline Company

OIL AND GASOLINE SPILL BEHAVIOR ON LAND, WATER

PRODUCT MOVEMENT ON LAND

When a product spill occurs on land, immediate action is required to prevent the petroleum product from harming ground or surface water, human life, wildlife, and highly sensitive environmental areas. Product behaves similarly to water. The relative velocities across the soil surface depend on the slope of the terrain, the dimensions of a channel, the soil permeability, the depth of flow, and viscosity and weight of the fluid. Water generally moves with a velocity of two feet per second in well-defined channels with moderate slopes. Petroleum products behave in the same way.

VERTICAL MOVEMENT THROUGH SOIL

On undisturbed soil, product will move downward under the force of gravity, while spreading laterally. The rate of movement depends on the viscosity of the product and the permeability of the soil. Downward movement eventually will be interrupted by one of three events: Flow of the product is stopped, the product reaches an impervious soil stratum, or the product reaches the local water table. As the product moves downward, small amounts will attach to soil particles and remain behind the main body.

HORIZONTAL MOVEMENT OF PRODUCT ON LAND

If a petroleum product is not immediately contained, it will tend to flow into existing drainage ditches, storm sewers, and surface water.

Advance knowledge of existing locations of storm sewers, sanitary sewers, water intakes, and their destinations should be obtained. These structures should be immediately protected when there is a product spill.

PRODUCT MOVEMENT ON WATER

Product on water moves as a result of wind or current velocity; a useful approximation is that a product slick moves with the wind at about 3 to 4% of the wind velocity.

PROPERTIES OF REFINED PETROLEUM PRODUCTS THAT AFFECT RECOVERY

Of the different ways product may interact with the environment, the rate of spreading is one of the most important. One factor that controls the product spread rate is the viscosity of the product (the degree to which a fluid resists flow under an applied force). The less viscous products will spread faster than the more viscous oils. Viscosity increases as temperatures drop. When the temperature is very low, fuel oil spilled on the ground will not penetrate the soil as quickly or spread as rapidly over the surface as it would in the summer. Winter temperatures do not drop low enough to significantly affect the penetration or spread of gasoline or kerosene.

Volatility is another important characteristic because it governs the rate of evaporation of spilled product. Distillation ranges for the various refined products are as follows:

Colonial Pipeline Company

OIL AND GASOLINE SPILL BEHAVIOR ON LAND, WATER

DISTILLATION RANGES OF REFINED PRODUCTS

Product	Distillation Range, F
Gasoline	90-430
JP-5	220-572
Kerosene	220-572
No. 2 Fuel Oil	350-670

Gasoline has a lower distillation range and will evaporate more readily than kerosene or No. 2 fuel oil. The amount of evaporation depends upon exposed surface area, wind conditions, humidity, temperature, wave action on water, and soil permeability on land.

Evaporation can result in the loss of a significant portion of the spilled product.

All refined petroleum products shipped by Colonial's system are less dense than water and will float on the surface.

DENSITY OF REFINED PRODUCTS

Product	API Gravity	Specific Gravity	Density lbs/gal
Gasoline	62.0	0.73	6.08
Kerosene	42.5	0.813	6.77
Fuel Oil	33.0	0.860	7.16
Water	10.0	1.0	8.33

A small amount of product will dissolve or emulsify into water and is non-recoverable. Studies have shown that water under an oil slick may contain five to ten parts per million (ppm) of dissolved product, but as soon as the spill breaks up the level drops to about one ppm or less. Less than one percent of spilled product is lost by dissolving or emulsifying into the water.

WEATHERING AND DEGRADATION

Weathering (evaporation) and biodegradation are two natural processes that affect the behavior of a product spill on a long term basis. When exposed to air or water, petroleum products begin to evaporate, and/or dissolve, with the lighter distillates evaporating first. The heavier components are the least biodegradable products and form the most stable water/oil emulsions.

Weathering decreases when a product is absorbed or covered by snow, or when the surface area exposed to wind is otherwise reduced. Burning or sorbent effectiveness also decrease with weathering.

Biodegradation results in the breakdown of oil by microorganisms. This process is active in terrestrial and aquatic environments. It usually progresses more rapidly in terrestrial than in aquatic habitats. As with weathering, the lighter products biodegrade quickly, the heavier components take more time. The rate of biodegradation decreases with lowering temperatures and virtually stops in freezing temperatures. However, it has been shown that careful application of fertilizer and the use of tilling can speed up biodegradation.

SAFETY DATA SHEETS

Generic Safety Data Sheets (SDS) for the product shipped through Colonial's system, including transmix, are contained in the following pages. Safety Data Sheets for products that may be used or stored in a particular facility are contained in the SDS Binder at the facility.

SAFETY DATA SHEET

Gasoline (All Grades)

SAFETY DATA SHEET

Gasoline (all grades)

Section 1. Identification

Product identifier used on the label

Gasoline (all grades).

Other means of identification

Regular Unleaded Gasoline, Midgrade Unleaded Gasoline, Premium Unleaded Gasoline, Pre-certified Gasoline.

Product Type

Liquid.

Recommended use and restrictions

Identified Uses

Fuel.

Supplier/Manufacturer

Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: http://www.colpipe.com/

Emergency telephone number (with hours of operation)

CHEMTREC, U.S.: 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards Identification

Classification of the substance or mixture

FLAMMABLE LIQUIDS - Category 1
SKIN CORROSION/IRRITATION - Category 2
GERM CELL MUTAGENICITY - Category 1B CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION [Fertility] - Category 2
TOXIC TO REPRODUCTION [Unborn child] - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) INHALATION [central nervous system (CNS)] - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
AQUATIC TOXICITY (ACUTE) - Category 3
AQUATIC TOXICITY (CHRONIC) - Category 2

Ingredients of unknown toxicity

Not applicable.

Ingredients of unknown ecotoxicity

Not applicable.

GHS Label Elements

Hazard Pictograms

Signal Word

Danger.

Hazard Statements

Extremely flammable liquid and vapor.
Causes skin irritation.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May be fatal if swallowed and enters airways.
May cause damage to organs if inhaled. (central nervous system (CNS)).
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

Precautionary Statements

General

Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Use explosion-proof electrical, ventilating, lighting and all material handling equipment. Avoid release to the environment. Do not breathe vapor.

Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage

Keep cool.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification

Not available.

Section 3. Composition/information on ingredients

Substance/Mixture Mixture.

Other Means of Identification Regular Unleaded Gasoline, Midgrade Unleaded Gasoline, Premium Unleaded Gasoline, Pre-certified Gasoline.

CAS Number/Other Identifiers

CAS Number Not applicable.

EC Number Mixture.

Product Code Not available.

Ingredient name	%	CAS number
Gasoline, natural	100	8006-61-9
Contains:		
Xylene	10 - 30	1330-20-7
Toluene	10 - 30	108-88-3
n-Hexane	1 - 5	110-54-3
Benzene	1 - 5	71-43-2
1,2,4-Trimethylbenzene	1 - 5	95-63-6
Ethylbenzene	1 - 5	100-41-4
Naphthalene	1 - 5	91-20-3

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20

minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Eye Contact

Causes serious eye irritation.

Inhalation

May cause damage to organs following a single exposure if inhaled.

Skin Contact

Causes skin irritation.

Ingestion

May be fatal if swallowed and enters airways. Irritating to mouth, throat, and stomach.

Over-exposure signs/symptoms

Eye Contact

Adverse symptoms may include the following:
Pain or irritation
Watering
Redness

Inhalation

Adverse symptoms may include the following:
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations

Skin Contact

Adverse symptoms may include the following:
Irritation
Redness
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations

Ingestion

Adverse symptoms may include the following:
Nausea or vomiting
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific Treatments

No specific treatment.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing Media

Suitable extinguishing media

Use dry chemical, CO_2, water spray (fog) or foam

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

Extremely flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or

diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protections

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Gasoline, natural	**OSHA PEL 1989 (United States, 3/1989).** STEL: 1500 mg/m³ 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 900 mg/m³ 8 hour(s). TWA: 300 ppm 8 hour(s).
Xylene	**ACGIH TLV (United States, 1/2011).** STEL: 651 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 434 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 100 ppm 8 hour(s). TWA: 435 mg/m³ 8 hour(s).
Toluene	**NIOSH REL (United States, 6/2009).** STEL: 560 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 375 mg/m³ 10 hour(s). TWA: 100 ppm 10 hour(s). **OSHA PEL Z2 (United States, 11/2006).** AMP: 500 ppm 10 minute(s). CEIL: 300 ppm TWA: 200 ppm 8 hour(s). **ACGIH TLV (United States, 1/2011).** TWA: 20 ppm 8 hour(s).
n-Hexane	**ACGIH TLV (United States, 2/2010). Absorbed through skin.** TWA: 50 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** TWA: 180 mg/m³ 10 hour(s). TWA: 50 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 1800 mg/m³ 8 hour(s). TWA: 500 ppm 8 hour(s).
Benzene	**ACGIH TLV (United States, 2/2010). Absorbed through skin.** STEL: 8 mg/m³ 15 minute(s). STEL: 2.5 ppm 15 minute(s).

	TWA: 1.6 mg/m³ 8 hour(s). TWA: 0.5 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** STEL: 1 ppm 15 minute(s). TWA: 0.1 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).** STEL: 5 ppm 15 minute(s). TWA: 1 ppm 8 hour(s). **OSHA PEL Z2 (United States, 11/2006).** AMP: 50 ppm 10 minute(s). CEIL: 25 ppm TWA: 10 ppm 8 hour(s).
1,2,4-Trimethylbenzene	**ACGIH TLV (United States, 1/2011).** TWA: 123 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** TWA: 125 mg/m³ 10 hour(s). TWA: 25 ppm 10 hour(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 25 ppm 8 hour(s). TWA: 125 mg/m³ 8 hour(s).
Ethylbenzene	**ACGIH TLV (United States, 1/2011).** TWA: 20 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** STEL: 545 mg/m³ 15 minute(s). STEL: 125 ppm 15 minute(s). TWA: 435 mg/m³ 10 hour(s). TWA: 100 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 435 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).
Naphthalene	**ACGIH TLV (United States, 1/2011).** STEL: 79 mg/m³ 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 52 mg/m³ 8 hour(s). TWA: 10 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** STEL: 75 mg/m³ 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 50 mg/m³ 10 hour(s). TWA: 10 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).**

	TWA: 50 mg/m³ 8 hour(s). TWA: 10 ppm 8 hour(s).

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection	Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Color	Colorless.
Odor	Gasoline.
Odor threshold	0.06 to 0.08 ppm
pH	Not applicable.
Melting point/freezing point	Not available.
Boiling point/boiling range	26.667 to 225°C (80 to 437°F)
Flash point	Closed cup: -42.778°C (-45°F)
Evaporation rate	<1 (Ethyl Ether = 1)
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Lower: 1.4% Upper: 7.6%
Vapor pressure	26.7 to 93.3 kPa (200 to 700 mm Hg) [20°C]
Vapor density	3 to 4 [Air = 1]
Relative density	0.7 to 0.77
Solubility	Very slightly soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	257.22°C (495°F)
Decomposition temperature	Not available.
SADT	Not available.
Viscosity	Kinematic (37.8°C (100°F)): 0.00216 cm^2/s (0.216 cSt)

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene	LC50 Inhalation Gas LD50	Rat	5000 ppm	4 hours
	Oral	Rat	4300 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m3	4 hours
	LD50 Oral	Rat	636 mg/kg	-
n-Hexane	LC50 Inhalation Gas LD50	Rat	48000 ppm	4 hours
	Oral	Rat	15840 mg/kg	-
Benzene	LD50 Oral	Rat	930 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m3	4 hours
	LD50 Oral	Rat	5 g/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Gasoline, natural	Eyes - Mild irritant	Human	-	8 hours 140 ppm	-
	Eyes - Moderate irritant	Man	-	1 hours 500 ppm	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat		8 hours 60 µL	-
	Skin - Moderate irritant	Rabbit		24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit		100%	-
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Mild irritant	Rabbit		870 µg	-
	Eyes - Severe irritant	Rabbit		24 hours 2 mg	-
	Skin - Mild irritant	Pig		24 hours 250 µL	-
	Skin - Mild irritant	Rabbit		435 mg	-
	Skin - Moderate irritant	Rabbit		500 mg	-
n-Hexane	Eyes - Mild irritant	Rabbit	-	10 mg	-
Benzene	Eyes - Moderate irritant	Rabbit	-	88 mg	-

	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Naphthalene	Skin - Mild irritant Skin -	Rabbit	-	495 mg	-
	Severe irritant	Rabbit	-	24 hours 0.05 mL	-

Sensitization

Skin There is no data available.

Respiratory There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Gasoline, natural	-	2B	-	+	-	-
Xylene	A4	3	-	-	-	-
Toluene	A4	3	-	-	-	-
Benzene	A1	1	-	+	Proven.	+
Ethylbenzene	A3	2B	-	None.	-	-
Naphthalene	A4	2B	-	None.	Possible.	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 2	Inhalation	Central nervous system (CNS)
	Category 3	Not determined	Respiratory tract irritation
		Inhalation	Narcotic effects
n-Hexane	Category 3	Not determined	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	Not determined	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
n-Hexane	Category 2	Not determined	Not determined
Benzene	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
Gasoline, natural	ASPIRATION HAZARD – Category 1
Toluene	ASPIRATION HAZARD – Category 1
n-Hexane	ASPIRATION HAZARD – Category 1
Benzene	ASPIRATION HAZARD – Category 1

Information on the likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact Causes serious eye irritation.

Inhalation May cause damage to organs following a single exposure if inhaled.

Skin contact Causes skin irritation.

Ingestion May be fatal if swallowed and enters airways. Irritating to mouth, throat, and stomach.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact: Adverse symptoms may include the following:
Pain or irritation
Watering
Redness

Inhalation Adverse symptoms may include the following:
Irritation

Skin Contact

Ingestion Adverse symptoms may include the following:
Nausea or vomiting
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects No known significant effects or critical hazards.

Potential delayed effects No known significant effects or critical hazards.

Long term exposure

Potential immediate effects No known significant effects or critical hazards.

Potential delayed effects No known significant effects or critical hazards.

Potential chronic health effects

General May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity May cause genetic defects.

Teratogenicity Suspected of damaging the unborn child.

Developmental effects No known significant effects or critical hazards.

Fertility effects Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE Value
Oral	24747.5mg/kg
Dermal	7407.4 mg/kg
Inhalation (gases)	30303 ppm
Inhalation (vapors)	204.1 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Gasoline, natural	Acute EC50 17.5 mg/L Marine water	Crustaceans - Artemia sp. - Nauplii - es7:k56s:7pt	48 hours
	Acute EC50 1.5 mg/L Marine water	Daphnia - Daphnia magna - Neonate - <24 hours	48 hours
Xylene	Acute IC50 10 mg/L	Algae	72 hours
	Acute LC50 8500 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 3300 to 4093 ug/L Fresh water	Fish - Oncorhynchus mykiss - 0.6 g	96 hours
Toluene	Acute EC50 12500 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 ug/L Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult - 9 mm - 0.017 g	48 hours
	Acute EC50 6000 ug/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling,	48 hours

		Weanling)	
	Acute LC50 5500 ug/L Fresh water	Fish - Oncorhynchus kisutch - Fry - 1 g	96 hours
	Chronic NOEC mg/L Fresh water	Daphnia - Daphnia magna	21 days
n-Hexane	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours
Benzene	Acute EC50 29000 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 1600000 ug/L Fresh water	Algae - Selenastrum sp.	96 hours
	Acute EC50 9230 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 21000 ug/L Marine water	Crustaceans - Artemia salina – Nauplii	48 hours
	Acute LC50 5.28 ul/L Fresh water	Fish - Oncorhynchus gorbuscha - Fry	96 hours
	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 18.1 cm - 3.39 g	4 weeks
1,2,4-Trimethylbenzene	Acute LC50 4910 ug/L Marine water	Crustaceans - Elasmopus pectinicrus – Adult	48 hours
	Acute LC50 7720 to 8280 ug/L Fresh water	Fish - Pimephales promelas - 34 days	96 hours
Ethylbenzene	Acute EC50 4600 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6530 ug/L Fresh water	Crustaceans - Artemia sp. - Nauplii - es7:k56s:7pt	48 hours
	Acute EC50 2970 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 4200 ug/L Fresh water	Fish - Oncorhynchus mykiss	96 hours
Naphthalene	Acute EC50 1600 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 2350 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 ug/L Fresh water	Fish - Melanotaenia fluviatilis - Larvae - 1 days	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Xylene	3.16	-	Low
Toluene	2.69	8.317637711	Low
n-Hexane	3.9	-	Low
Benzene	2.13	4.265795188	low
1,2,4-Trimethylbenzene	3.8	120.226443461	Low
Ethylbenzene	3.1	-	Low
Naphthalene	3.3	85.11380382	Low

Mobility in soil

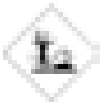
Soil/water partition coefficient (KOC) There is no data available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

	DOT	IMDG	IATA
UN number	UN1203	UN1203	UN1203
UN proper shipping name	GASOLINE. Marine pollutant (Gasoline, natural)	GASOLINE. Marine pollutant (Gasoline, natural)	GASOLINE. Marine pollutant (Gasoline, natural)
Transport hazard class(es)	3 	3	3
Packing group	II	II	II

Environmental hazards	Yes.	Yes.	Yes.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	**Limited quantity** Yes. **Packaging instruction** **Passenger aircraft** Quantity limitation: 5 L **Cargo aircraft** Quantity limitation: 60 L **Special provisions** 139, B33, B1, T8	-	**Passenger and Cargo Aircraft** Quantity limitation: 5 L **Cargo Aircraft Only** Quantity limitation: 60 L **Limited Quantities – Passenger Aircraft** Quantity limitation: 1 L

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

Section 15. Regulatory information

Safety, health, and environmental regulations specific for the product

No known specific national and/or regional regulations applicable to this product (including its ingredients).

U.S. Federal regulations

TSCA 8(a) PAIR: Naphthalene

TSCA 8(a) IUR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Gasoline, natural; Xylene; Toluene; n-Hexane; Naphthalene; 1,2,4-Trimethylbenzene; Ethylbenzene; Benzene

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Gasoline, natural: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Xylene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Toluene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; n-Hexane: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Naphthalene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; 1,2,4-Trimethylbenzene: Fire hazard, Delayed (chronic) health hazard; Ethylbenzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Benzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: Toluene; Benzene; Ethylbenzene; Naphthalene

Clean Water Act (CWA) 311: Xylene; Toluene; Benzene; Ethylbenzene; Naphthalene

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) Listed.

Clean Air Act Section 602 Class I Substances Not listed.

Clean Air Act Section 602 Class II Substances Not listed.

DEA List I Chemicals (Precursor Chemicals) Not listed.

DEA List II Chemicals (Essential Chemicals) Listed.

SARA 313

	Product name	CAS number	Concentration
Form R – Reporting requirements	Xylene	1330-20-7	10 - 30
	Toluene	108-88-3	10 - 30
	n-Hexane	110-54-3	1 - 5
	Benzene	71-43-2	1 - 5
	1,2,4-Trimethylbenzene	95-63-6	1 - 5
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5
Supplier notification	Xylene	1330-20-7	10 - 30
	Toluene	108-88-3	10 - 30
	n-Hexane	110-54-3	1 - 5
	Benzene	71-43-2	1 - 5
	1,2,4-Trimethylbenzene	95-63-6	1 - 5
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts The following components are listed: Gasoline, natural; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene

New York The following components are listed: Xylene; Toluene; n-Hexane;

Benzene; Ethylbenzene; Naphthalene

New Jersey The following components are listed: Gasoline, natural; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene

Pennsylvania The following components are listed: Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	No.	Yes.	No.	7000 µg/day (ingestion) 13000 µg/day (inhalation)
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
Ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.
Naphthalene	Yes.	No.	Yes.	No.

Section 16. Other Information

History

Date of issue mm/dd/yyyy 07/15/2012

Version 1

Prepared by KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

Diesel Fuel (All Grades)

SAFETY DATA SHEET

Diesel fuel (All Grades)

Section 1. Identification

Product identifier used on the label

Diesel fuel (all grades).

Other means of identification

Ultra Low Sulfur Diesel (ULSD), Low Sulfur Diesel, Motor Vehicle Diesel Fuel, Diesel Fuel #2, Dyed Diesel Fuel, Off-road Diesel, Locomotive and Marine Diesel Fuel, Tax- exempt Diesel Fuel, Fuel Oil.

Product type

Liquid.

Recommended use and restrictions

Identified uses

Fuel.

Supplier/Manufacturer

Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: http://www.colpipe.com/

Emergency telephone number (with hours of operation)

CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards Identification

Classification of the substance or mixture

FLAMMABLE LIQUIDS - Category 3
CARCINOGENICITY - Category 2

Ingredients of unknown toxicity

Not applicable.

Ingredients of unknown ecotoxicity

Not applicable.

GHS label elements

Hazard pictograms

Signal word Warning.

Hazard statements Flammable liquid and vapor.
Suspected of causing cancer.

Precautionary statements

General Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Use explosion-proof electrical, ventilating, lighting and all material handling equipment.

Response IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage Keep cool.

Disposal Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification Not available.

Section 3. Composition/information on ingredients

Substance/mixture Substance

Other means of identification Ultra Low Sulfur Diesel (ULSD), Low Sulfur Diesel, Motor Vehicle Diesel Fuel, Diesel Fuel #2, Dyed Diesel Fuel, Off-road Diesel, Locomotive and Marine Diesel Fuel, Tax- exempt Diesel Fuel, Fuel Oil.

CAS number/other identifiers

CAS number 68476-30-2

EC number Not available.

Product code Not available.

Ingredient name	%	CAS number
Fuel oil no. 2	60 - 100	68476-30-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Eye contact

No known significant effects or critical hazards.

Inhalation

No known significant effects or critical hazards.

Skin contact

No known significant effects or critical hazards.

Ingestion No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Ingestion No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media Do not use water jet.

Specific hazards arising from the chemical Flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products No specific data.

Special protective actions for fire-fighters Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove

contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protections

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Fuel oil no. 2	**ACGIH TLV (United States, 2/2010). Absorbed through skin.** TWA: 100 mg/m³, (measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe

working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Color	Straw.
Odor	Petroleum-like.
Odor threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Boiling point/boiling range	320 to 670°C (608 to 1238°F)
Flash point	Closed cup: 43.33°C (110°F)
Evaporation rate	<1 (Ethyl Ether = 1)
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Lower: 0.6% Upper: 7.5%
Vapor pressure	6.9 kPa (51.6 mm Hg) [20°C]
Vapor density	8[Air = 1]
Relative density	0.87
Solubility	Very slightly soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	260°C (500°F)
Decomposition temperature	Not available.
SADT	Not available.
Viscosity	Kinematic (40°C (104°F)): 0.019 to 0.041 cm^2/s (1.9 to 4.1 cSt)

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fuel oil no. 2	LD50 Oral	Rat	12 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fuel oil no. 2	Eyes - Mild irritant Eyes - Moderate irritant	Rabbit Rabbit	- -	0.5 minutes 100 mg 24 hours 500 mg	- -

Sensitization

Skin

There is no data available.

Respiratory

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Fuel oil no. 2	A3	3	-	-	-	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure	Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	No known significant effects or critical hazards.
Potential delayed effects	No known significant effects or critical hazards.

Long term exposure

Potential immediate effects	No known significant effects or critical hazards.
Potential delayed effects	No known significant effects or critical hazards.

Potential chronic health effects

General	No known significant effects or critical hazards.
Carcinogenicity	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Numerical measures of toxicity
Acute toxicity estimates
There is no data available.

Section 12. Ecological information

Toxicity
There is no data available.

Persistence and degradability
There is no data available.

Bioaccumulative potential
There is no data available.

Mobility in soil
Soil/water partition coefficient (K_{OC}) There is no data available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

	DOT	IMDG	IATA
UN number	NA1993	NA1993	NA1993
UN proper shipping name	Fuel oil no. 2	Fuel oil no. 2	Fuel oil no. 2
Transport hazard class(es)	3	3	3

Packing group	III	III	III
Environmental hazards	No.	No.	No.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

Section 15. Regulatory information

Safety, health, and environmental regulations specific for the product

No known specific national and/or regional regulations applicable to this product (including its ingredients).

U.S. Federal regulations

TSCA 8(a) IUR Exempt/Partial exemption: All components are listed or exempted.
United States inventory (TSCA 8b): All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Fuel oil no. 2
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Fuel oil no. 2: Fire hazard, Immediate (acute) health hazard

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

Not listed.

Clean Air Act Section 602 Class I Substances

Not listed.

Clean Air Act Section 602 Class II Substances	Not listed.
DEA List I Chemicals (Precursor Chemicals)	Not listed.
DEA List II Chemicals (Essential Chemicals)	Not listed.

State regulations

Massachusetts	None of the components are listed.
New York	None of the components are listed.
New Jersey	None of the components are listed.
Pennsylvania	The following components are listed: Fuel oil no. 2

California Prop. 65

No products were found.

Section 16. Other Information

History

Date of issue mm/dd/yyyy	07/15/2012
Version	1
Prepared by	KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

Kerosene (All Grades)

SAFETY DATA SHEET

Kerosene (All Grades)

Section 1. Identification

Product identifier used on the label

Kerosene (all grades)

Other means of identification

Kerosene, Jet Fuel, Aviation Jet Fuel, AvJet, Kero, Military Jet Fuel.

Product type

Liquid.

Recommended use and restrictions

Identified uses

Fuel.

Supplier/Manufacturer

Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: http://www.colpipe.com/

Emergency telephone number (with hours of operation)

CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards Identification

Classification of the substance or mixture

FLAMMABLE LIQUIDS - Category 3
ASPIRATION HAZARD – Category 1

Ingredients of unknown toxicity

Not applicable.

Ingredients of unknown ecotoxicity

Not applicable.

GHS label elements

Hazard pictograms

Signal word

Danger.

Hazard statements

Flammable liquid and vapor.
May be fatal if swallowed and enters airways.

Precautionary statements

Prevention

Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage

Keep cool.

Disposal

Not applicable.

Other hazards which do not result in classification

Not available.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture.

Other means of identification

Kerosine, Jet Fuel, Aviation Jet Fuel, AvJet, Kero, Military Jet Fuel.

CAS number/other identifiers

CAS number

Not applicable.

EC number

Mixture.

Product code

Not available.

Ingredient name	%	CAS number
Kerosene	60 – 100	8008-20-6
Contains:		
Naphthalene	0-0.04	91-20-3
A complex combination of hydrocarbons including naphthenes, paraffins, and aromatics	-	-

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Eye contact

No known significant effects or critical hazards.

Inhalation

No known significant effects or critical hazards.

Skin contact

No known significant effects or critical hazards.

Ingestion

May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact

No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Ingestion Adverse symptoms may include the following:
Nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11).

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media Do not use water jet.

Specific hazards arising from the chemical Flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products No specific data.

Special protective actions for fire-fighters Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing

vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protections

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Kerosene	**NIOSH REL (United States, 6/2009).** TWA: 100 mg/m³ 10 hour(s). **ACGIH TLV (United States, 2/2010). Absorbed through skin.** TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hour(s).

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	Liquid [Clear].
Color	Straw.
Odor	Kerosene-like.
Odor threshold	100 ppm
pH	Not applicable.
Melting point/freezing point	-18°C (-0.4°F)
Boiling point/boiling range	151 to 301°C (304 to 574°F)
Flash point	Closed cup: 43.33°C (110°F) [Pensky-Martens.]
Evaporation rate	Slow; varies with conditions

Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Lower: 0.7% Upper: 5%
Vapor pressure	0.053 kPa (0.4 mm Hg) [20°C]
Vapor density	4.5[Air = 1]
Relative density	0.82
Solubility	Very slightly soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	210°C (410°F)
Decomposition temperature	Not available.
SADT	Not available.
Viscosity	Kinematic (40°C (104°F)): >0.013 cm^2/s (>1.3 cSt)

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Kerosene	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Kerosene	Skin - Severe irritant Skin - Moderate irritant Skin - Moderate irritant	Rabbit Rabbit Rabbit	- - -	500 mg 24 hours 100% 0.5 mL	- - -

Sensitization

Skin There is no data available.

Respiratory There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Kerosene	A3	-	-	-	-	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

Name	Result
Kerosene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Ingestion May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin Contact No known significant effects or critical hazards.

Ingestion Adverse symptoms may include the following:
Nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects No known significant effects or critical hazards.

Potential delayed effects No known significant effects or critical hazards.

Long term exposure

Potential immediate effects No known significant effects or critical hazards.

Potential delayed effects No known significant effects or critical hazards.

Potential chronic health effects

General No known significant effects or critical hazards.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) There is no data available.

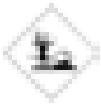
Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

Section 14. Transport Information

	DOT	IMDG	IATA
UN number	UN1223	UN1223	UN1223
UN proper shipping name	Kerosene	Kerosene	Kerosene
Transport hazard class(es)	3 	3	3
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.

Section 15. Regulatory information

Safety, health, and environmental regulations specific for the product	No known specific national and/or regional regulations applicable to this product (including its ingredients).
U.S. Federal regulations	**TSCA 8(a) PAIR**: Naphthalene. **TSCA 8(a) IUR Exempt/Partial exemption**: Not determined. **United States inventory (TSCA 8b)**: Not determined. **SARA 302/304/311/312 extremely hazardous substances**: No products were found. **SARA 302/304 emergency planning and notification**: No products were found. **SARA 302/304/311/312 hazardous chemicals**: Kerosene. **SARA 311/312 MSDS distribution - chemical inventory - hazard identification**: Kerosene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard. **Clean Water Act (CWA) 307**: Naphthalene. **Clean Water Act (CWA) 311**: Naphthalene.
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Not listed.
Clean Air Act Section 602 Class I Substances	Not listed.
Clean Air Act Section 602 Class II Substances	Not listed.
DEA List I Chemicals (Precursor Chemicals)	Not listed.
DEA List II Chemicals (Essential Chemicals)	Not listed.
State regulations	
Massachusetts	The following components are listed: Kerosene.
New York	None of the components are listed.
New Jersey	The following components are listed: Kerosene.

Pennsylvania The following components are listed: Kerosene.

California Prop. 65

No products were found.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Naphthalene	Yes.	No.	Yes.	No.

Section 16. Other Information

History

Date of issue mm/dd/yyyy 07/15/2012

Version 1

Prepared by KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

Transmix

Prevention

Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Use explosion-proof electrical, ventilating, lighting and all material handling equipment. Avoid release to the environment. Do not breathe vapor.

Response

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage

Keep cool.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification

Not available.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture.

Other means of identification

This Safety Data Sheet represents the composite characteristics and properties of fungible petroleum hydrocarbons and other related substances transported by Colonial Pipeline Company. Transmix is the trade/industry name for mixtures of refined petroleum products in unknown concentrations.

CAS number/other identifiers

CAS number

Not applicable.

EC number

Mixture.

Product code

Not available.

Ingredient name	%	CAS number
Distillates (petroleum), full-range straight-run middle	60 - 100	68814-87-9
Fuel oil no. 2	60 - 100	68476-30-2
Kerosene	60 - 100	8008-20-6
Distillates (petroleum), light catalytic cracked	30 - 60	64741-59-9
Xylene	10 - 30	1330-20-7
Toluene	10 - 30	108-88-3
n-Hexane	1 - 5	110-54-3
Benzene	1 - 5	71-43-2

1,2,4-Trimethylbenzene	1 - 5	95-63-6
Ethylbenzene	1 - 5	100-41-4
Naphthalene	1 - 5	91-20-3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Eye contact Causes serious eye irritation.

Inhalation Harmful if inhaled. May cause damage to organs following a single exposure if inhaled.

Skin contact Causes skin irritation.

Ingestion May be fatal if swallowed and enters airways. Irritating to mouth, Throat and stomach.

Over-exposure signs/symptoms

Eye contact Adverse symptoms may include the following:
Pain or irritation
Watering
Redness

Inhalation Adverse symptoms may include the following:
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations

Skin contact Adverse symptoms may include the following:
Irritation
Redness
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations

Ingestion Adverse symptoms may include the following:
Nausea or vomiting
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11).

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

Flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials:
Carbon dioxide
Carbon monoxide

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if

released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protections

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Gasoline	**ACGIH TLV (United States, 2/2010).** TWA: 300 ppm 8 hour(s). TWA: 890 mg/m³ 8 hour(s). STEL: 500 ppm 15 minute(s). STEL: 1480 mg/m³ 15 minute(s).
Fuel oil no. 2	**ACGIH TLV (United States, 2/2010). Absorbed through skin.** TWA: 100 mg/m³, (measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons
Kerosene	**NIOSH REL (United States, 6/2009).** TWA: 100 mg/m³ 10 hour(s).
Xylene	**ACGIH TLV (United States, 1/2011).** STEL: 651 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 434 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 100 ppm 8 hour(s). TWA: 435 mg/m³ 8 hour(s).
Toluene	**NIOSH REL (United States, 6/2009).** STEL: 560 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 375 mg/m³ 10 hour(s). TWA: 100 ppm 10 hour(s). **OSHA PEL Z2 (United States, 11/2006).** AMP: 500 ppm 10 minute(s). CEIL: 300 ppm TWA: 200 ppm 8 hour(s). **ACGIH TLV (United States, 1/2011).** TWA: 20 ppm 8 hour(s).
n-Hexane	**ACGIH TLV (United States, 2/2010). Absorbed through skin.** TWA: 50 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** TWA: 180 mg/m³ 10 hour(s). TWA: 50 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 1800 mg/m³ 8 hour(s). TWA: 500 ppm 8 hour(s).
Benzene	**ACGIH TLV (United States, 2/2010). Absorbed through skin.** STEL: 8 mg/m³ 15 minute(s). STEL: 2.5 ppm 15 minute(s). TWA: 1.6 mg/m³ 8 hour(s). TWA: 0.5 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).**

	STEL: 1 ppm 15 minute(s). TWA: 0.1 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).** STEL: 5 ppm 15 minute(s). TWA: 1 ppm 8 hour(s). **OSHA PEL Z2 (United States, 11/2006).** AMP: 50 ppm 10 minute(s). CEIL: 25 ppm TWA: 10 ppm 8 hour(s).
1,2,4-Trimethylbenzene	**ACGIH TLV (United States, 1/2011).** TWA: 123 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** TWA: 125 mg/m³ 10 hour(s). TWA: 25 ppm 10 hour(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 25 ppm 8 hour(s). TWA: 125 mg/m³ 8 hour(s).
Ethylbenzene	**ACGIH TLV (United States, 1/2011).** TWA: 20 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** STEL: 545 mg/m³ 15 minute(s). STEL: 125 ppm 15 minute(s). TWA: 435 mg/m³ 10 hour(s). TWA: 100 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 435 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).
Naphthalene	**ACGIH TLV (United States, 1/2011).** STEL: 79 mg/m³ 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 52 mg/m³ 8 hour(s). TWA: 10 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** STEL: 75 mg/m³ 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 50 mg/m³ 10 hour(s). TWA: 10 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 50 mg/m³ 8 hour(s). TWA: 10 ppm 8 hour(s).

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Color	Bronzed to Pink.
Odor	Petroleum.
Odor threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Boiling point/boiling range	80 to 680°C (176 to 1256°F)
Flash point	Closed cup: -34.44 to 43.33°C (-30 to 110°F)
Evaporation rate	<1 (Ethyl Ether = 1)
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Lower: 1.4% Upper: 7.4%
Vapor pressure	26.7 to 93.3 kPa (200 to 700 mm Hg) [20°C]
Vapor density	3 to 8[Air = 1]
Relative density	0.87
Solubility	Very slightly soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	257.22 to 260°C (495 to 500°F)
Decomposition temperature	Not available.
SADT	Not available.
Viscosity	Not available.

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials Reactive or incompatible with the following materials: oxidizing materials, acids, and alkalis.

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fuel oil no. 2	LD50 Oral	Rat	12 g/kg	-
Kerosene	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), light catalytic cracked	LC50 Inhalation Vapor	Rat	3400 mg/m3	4 hours
	LD50 Oral	Rat	3200 mg/kg	-
Xylene	LC50 Inhalation Gas	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m3	4 hours
	LD50 Oral	Rat	636 mg/kg	-
n-Hexane	LC50 Inhalation Gas	Rat	48000 ppm	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
Benzene	LD50 Oral	Rat	930 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m3	4 hours
	LD50 Oral	Rat	5 g/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fuel oil no. 2	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Kerosene	Skin - Severe irritant	Rabbit	-	500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100%	-
	Skin - Moderate irritant	Rabbit	-	0.5 mL	-
Distillates (petroleum), light catalytic cracked	Skin - Severe irritant	Rabbit	-	500 mg	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	100%	-
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Mild irritant	Rabbit	-	870 µg	-

	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Pig	-	24 hours 250 µL	-
	Skin - Mild irritant	Rabbit	-	435 mg	-
n-Hexane	Skin - Moderate irritant	Rabbit	-	500 mg	-
Benzene	Eyes - Mild irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	88 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
Ethylbenzene	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
	Skin - Mild irritant	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-

Sensitization

Skin There is no data available.

Respiratory There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Gasoline	A3	2B	-	+	-	-
Fuel oil no. 2	A3	3	-	-	-	-
Kerosene	A3	-	-	-	-	-
Distillates (petroleum), light catalytic cracked	-	2A	-	-	-	-
Xylene	A4	3	-	-	-	-
Toluene	A4	3	-	-	-	-
Benzene	A1	1	-	+	Proven.	+
Ethylbenzene	A3	2B	-	None.	-	-
Naphthalene	A4	2B	-	None.	Possible.	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 2	Inhalation	Central nervous system (CNS)
	Category 3	Not determined	Respiratory tract irritation
		Inhalation	Narcotic effects
n-Hexane	Category 3	Not determined	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	Not determined	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Distillates (petroleum), full-range straight-run middle	Category 2	Not determined	Not determined
n-Hexane	Category 2	Not determined	Not determined
Benzene	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
Distillates (petroleum), full-range straight-run middle	ASPIRATION HAZARD - Category 1
Kerosene	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1
n-Hexane	ASPIRATION HAZARD - Category 1
Benzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact Causes serious eye irritation.

Inhalation Harmful if inhaled. May cause damage to organs following a single exposure if inhaled.

Skin contact Causes skin irritation.

Ingestion May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact: Adverse symptoms may include the following:
Pain or irritation
Watering

	Redness
Inhalation	Adverse symptoms may include the following: Reduced fetal weight Increase in fetal deaths Skeletal malformations
Skin Contact	Adverse symptoms may include the following: Irritation Redness Reduced fetal weight Increase in fetal deaths Skeletal malformations
Ingestion	Adverse symptoms may include the following: Nausea or vomiting Reduced fetal weight Increase in fetal deaths Skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	No known significant effects or critical hazards.
Potential delayed effects	No known significant effects or critical hazards.

Long term exposure

Potential immediate effects	No known significant effects or critical hazards.
Potential delayed effects	No known significant effects or critical hazards.

Potential chronic health effects

General	May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	May cause genetic defects.
Teratogenicity	Suspected of damaging the unborn child.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	24747.5 mg/kg
Dermal	7407.4 mg/kg

Inhalation (gases) Inhalation (vapors)	30303 ppm 10.54 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Xylene	Acute IC50 10 mg/L	Algae	72 hours
	Acute LC50 8500 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 3300 to 4093 ug/L Fresh water	Fish - Oncorhynchus mykiss - 0.6 g	96 hours
Toluene	Acute EC50 12500 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 ug/L Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult - 9 mm - 0.017 g	48 hours
	Acute EC50 6000 ug/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 ug/L Fresh water	Fish - Oncorhynchus kisutch - Fry - 1 g	96 hours
	Chronic NOEC mg/L Fresh water	Daphnia - Daphnia magna	21 days
n-Hexane	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours
Benzene	Acute EC50 29000 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 1600000 ug/L Fresh water	Algae - Selenastrum sp.	96 hours
	Acute EC50 9230 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 21000 ug/L Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
	Acute LC50 5.28 ul/L Fresh water	Fish - Oncorhynchus gorbuscha - Fry	96 hours
1,2,4-Trimethylbenzene	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 18.1 cm - 3.39 g	4 weeks
	Acute LC50 4910 ug/L Marine water	Crustaceans - Elasmopus pectinicrus - Adult	48 hours
Ethylbenzene	Acute LC50 7720 to 8280 ug/L Fresh water	Fish - Pimephales promelas - 34 days	96 hours
	Acute EC50 4600 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6530 ug/L Fresh water	Crustaceans - Artemia sp. - Nauplii - es7:k56s:7pt	48 hours
	Acute EC50 2970 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 4200 ug/L Fresh water	Fish - Oncorhynchus mykiss	96 hours
Naphthalene	Acute EC50 1600 ug/L Fresh water	Daphnia - Daphnia magna -	48 hours

	Acute LC50 2350 ug/L Marine water Acute LC50 213 ug/L Fresh water	Neonate - <=24 hours Crustaceans - Palaemonetes pugio Fish - Melanotaenia fluviatilis - Larvae - 1 days	48 hours 96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Xylene	3.16	-	low
Toluene	2.69	8.317637711	low
n-Hexane	3.9	-	low
Benzene	2.13	4.265795188	low
1,2,4-Trimethylbenzene	3.8	120.226443461	low
Ethylbenzene	3.1	-	low
Naphthalene	3.3	85.11380382	low

Mobility in soil

Soil/water partition coefficient (KOC) There is no data available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

	DOT	IMDG	IATA
UN number	UN1993	UN1993	UN1993
UN proper shipping name	FLAMMABLE LIQUIDS, N.O.S. (Xylene, Toluene). Marine pollutant (Gasoline)	FLAMMABLE LIQUIDS, N.O.S. (Xylene, Toluene). Marine pollutant (Gasoline)	FLAMMABLE LIQUIDS, N.O.S. (Xylene, Toluene). Marine pollutant (Gasoline)
Transport hazard class(es)	3	3	3
Packing group	II	II	II
Environmental hazards	Yes.	Yes.	Yes.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

Section 15. Regulatory information

Safety, health, and environmental regulations specific for the product

No known specific national and/or regional regulations applicable to this product (including its ingredients).

U.S. Federal regulations

TSCA 8(a) PAIR: Naphthalene.

TSCA 8(a) IUR Exempt/Partial exemption: Not determined.

United States inventory (TSCA 8b): Not determined.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Gasoline; Xylene; Toluene; n- Hexane; Naphthalene; 1,2,4-Trimethylbenzene; Ethylbenzene; Benzene; Distillates (petroleum), light catalytic cracked; Fuel oil no. 2; Kerosene **SARA 311/312 MSDS distribution - chemical inventory - hazard identification**: Gasoline: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Xylene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Toluene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; n-Hexane: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Naphthalene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; 1,2,4-Trimethylbenzene: Fire hazard, Delayed (chronic) health hazard; Ethylbenzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Benzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Distillates (petroleum), light catalytic cracked: Delayed (chronic) health hazard; Fuel oil no. 2: Fire hazard, Immediate (acute) health hazard; Kerosene:

Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard.

Clean Water Act (CWA) 307: Toluene; Benzene; Ethylbenzene; Naphthalene.

Clean Water Act (CWA) 311: Xylene; Toluene; Benzene; Ethylbenzene; Naphthalene.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) Listed.

Clean Air Act Section 602 Class I Substances Not listed.

Clean Air Act Section 602 Class II Substances Not listed.

DEA List I Chemicals (Precursor Chemicals) Not listed.

DEA List II Chemicals (Essential Chemicals) Listed.

SARA 313

	Product name	CAS number	Concentration
Form R – Reporting requirements	Xylene	1330-20-7	10 - 30
	Toluene	108-88-3	10 - 30
	n-Hexane	110-54-3	1 - 5
	Benzene	71-43-2	1 - 5
	1,2,4-Trimethylbenzene	95-63-6	1 - 5
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5
Supplier notification	Xylene	1330-20-7	10 - 30
	Toluene	108-88-3	10 - 30
	n-Hexane	110-54-3	1 - 5
	Benzene	71-43-2	1 - 5
	1,2,4-Trimethylbenzene	95-63-6	1 - 5
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts The following components are listed: Kerosene; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene;

Naphthalene.

New York The following components are listed: Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; Naphthalene.

New Jersey The following components are listed: Kerosene; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene.

Pennsylvania The following components are listed: Gasoline; Kerosene; Fuel oil no. 2; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	No.	Yes.	No.	7000 µg/day (ingestion) 13000 µg/day (inhalation)
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
Ethybenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.
Naphthalene	Yes.	No.	Yes.	No.

Section 16. Other Information

History

Date of issue mm/dd/yyyy 07/15/2012

Version 1

Prepared by KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

Biodiesel (All Grades)

Section 1. Identification

Product identifier used on the label

Biodiesel (all grades).

Other means of identification

Bio-Fuel Oil #2, Bio-Fuel Oil, B100 Biodiesel.

Product type

Liquid.

Recommended use and restrictions

Identified uses

Fuel.

Supplier/Manufacturer

Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: http://www.colpipe.com/

Emergency telephone number (with hours of operation)

CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards Identification

Classification of the substance or mixture

FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY: INHALATION - Category 4
GERM CELL MUTAGENICITY - Category 1B CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
AQUATIC TOXICITY (CHRONIC) - Category 2

Ingredients of unknown toxicity

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 5%

Ingredients of unknown ecotoxicity

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5%

GHS label elements

Hazard pictograms

Signal word

Danger.

Hazard statements

Flammable liquid and vapor.
Harmful if inhaled.
May cause genetic defects.
May cause cancer.
May be fatal if swallowed and enters airways.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

Precautionary statements

General

Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Use explosion-proof electrical, ventilating, lighting, and all material handling equipment. Avoid release to the environment. Do not breathe vapor.

Response

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage

Keep cool.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification

Not available.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture.

Other means of identification

Bio-Fuel Oil #2, Bio-Fuel Oil, B100 Biodiesel.

CAS number/other identifiers

CAS number

Not applicable.

EC number Mixture.

Product code 28070

Ingredient name	%	CAS number
Distillates (petroleum), full-range straight-run middle	60 – 100	68814-87-9
Distillates (petroleum), light catalytic cracked	30 - 60	64741-59-9
Benzene	0.1 - 1	71-43-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention

immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation Harmful if inhaled.

Skin contact No known significant effects or critical hazards.

Ingestion May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Ingestion Adverse symptoms may include the following:
Nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11).

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials:
Carbon dioxide
Carbon monoxide

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion- proof electrical (ventilating, lighting and material handling) equipment. Use only non- sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protections

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Benzene	**ACGIH TLV (United States, 2/2010). Absorbed through skin.** STEL: 8 mg/m³ 15 minute(s). STEL: 2.5 ppm 15 minute(s). TWA: 1.6 mg/m³ 8 hour(s). TWA: 0.5 ppm 8 hour(s). **NIOSH REL (United States, 6/2009).** STEL: 1 ppm 15 minute(s). TWA: 0.1 ppm 10 hour(s). **OSHA PEL (United States, 6/2010).** STEL: 5 ppm 15 minute(s). TWA: 1 ppm 8 hour(s). **OSHA PEL Z2 (United States, 11/2006).** AMP: 50 ppm 10 minute(s). CEIL: 25 ppm TWA: 10 ppm 8 hour(s).

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Bright & clear.
Odor	Petroleum.
Odor threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Boiling point/boiling range	148°C (298.4°F)
Flash point	Closed cup: >51.67°C (>125°F)
Evaporation rate	Slow; varies with conditions

Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Lower: 0.5% Upper: 4.4%
Vapor pressure	0.0027 kPa (0.02 mm Hg) [20°C]
Vapor density	Not available.
Relative density	0.85
Solubility	Negligible.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	260°C (500°F)
Decomposition temperature	Not available.
SADT	Not available.
Viscosity	Kinematic (40°C (104°F)): 0.019 to 0.041 cm^2/s (1.9 to 4.1 cSt)

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), light catalytic cracked	LC50 Inhalation Vapor	Rat	3400 mg/m3	4 hours
	LD50 Oral	Rat	3200 mg/kg	-

Benzene	LD50 Oral	Rat	930 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Distillates (petroleum), light catalytic cracked	Skin - Severe irritant	Rabbit	-	500 mg	-
Benzene	Eyes - Moderate irritant	Rabbit	-	88 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-

Sensitization

Skin There is no data available.

Respiratory There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Distillates (petroleum), light catalytic cracked	-	2A	-	-	-	-
Benzene	A1	1	-	+	Proven.	+

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Distillates (petroleum), full-range straight-run middle	Category 2	Not determined	Not determined
Benzene	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
Distillates (petroleum), full-range straight-run middle	ASPIRATION HAZARD - Category 1
Benzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation Harmful if inhaled.

Skin contact No known significant effects or critical hazards.

Ingestion May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin Contact No known significant effects or critical hazards.

Ingestion Adverse symptoms may include the following:
Nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects No known significant effects or critical hazards.

Potential delayed effects No known significant effects or critical hazards.

Long term exposure

Potential immediate effects No known significant effects or critical hazards.

Potential delayed effects No known significant effects or critical hazards.

Potential chronic health effects

General May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity May cause cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity May cause genetic defects.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Numerical measures of toxicity
Acute toxicity estimates

Route	ATE value
Inhalation (vapors)	11 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Benzene	Acute EC50 29000 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 1600000 ug/L Fresh water	Algae - Selenastrum sp.	96 hours
	Acute EC50 9230 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 21000 ug/L Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
	Acute LC50 5.28 ul/L Fresh water	Fish - Oncorhynchus gorbuscha - Fry	96 hours
	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 18.1 cm - 3.39 g	4 weeks

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Benzene	2.13	4.265795188	low

Mobility in soil

Soil/water partition coefficient (KOC) There is no data available.

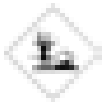
Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

	DOT	IMDG	IATA
UN number	UN1268	UN1268	UN1268
UN proper shipping name	PETROLEUM DISTILLATES, N.O.S.	PETROLEUM DISTILLATES, N.O.S.. Marine pollutant (Distillates (petroleum), full-range straight-run middle)	PETROLEUM DISTILLATES, N.O.S.
Transport hazard class(es)	3 	3	3
Packing group	III	III	III
Environmental hazards	No.	Yes.	Yes.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

Section 15. Regulatory information

Safety, health, and environmental regulations

No known specific national and/or regional regulations applicable to this product (including its ingredients).

specific for the product

U.S. Federal regulations

TSCA 8(a) IUR Exempt/Partial exemption: Not determined.

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Distillates (petroleum), light catalytic cracked.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Distillates (petroleum), light catalytic cracked: Delayed (chronic) health hazard.

Clean Water Act (CWA) 307: Benzene.

Clean Water Act (CWA) 311: Benzene.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

Not listed.

Clean Air Act Section 602 Class I Substances

Not listed.

Clean Air Act Section 602 Class II Substances

Not listed.

DEA List I Chemicals (Precursor Chemicals)

Not listed.

DEA List II Chemicals (Essential Chemicals)

Not listed.

SARA 313

	Product name	CAS number	Concentration
Form R – Reporting requirements	Benzene	71-43-2	0.1 - 1
Supplier notification	Benzene	71-43-2	0.1 - 1

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts

None of the components are listed.

New York The following components are listed: Benzene.

New Jersey The following components are listed: Benzene.

Pennsylvania The following components are listed: Benzene.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)

Section 16. Other Information

History

Date of issue mm/dd/yyyy 07/15/2012

Version 1

Prepared by KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Section 1. Identification

GHS product identifier : Naphtha

Other means of identification : Straight run naphtha, Sour naphtha, Crude topping unit naphtha, Petroleum Distillates (naphtha)

Product type : Liquid.

Identified uses

Gasoline blending.

Supplier's details : Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: http://www.colpipe.com/

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards identification

OSHA/HCS status (29 CFR 1910.1200) : This material is considered hazardous by the OSHA Hazard Communication Standard

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
GERM CELL MUTAGENICITY - Category 1B
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.
May cause genetic defects. May cause cancer.
Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non- sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response : Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Straight run naphtha, Sour naphtha, Crude topping unit naphtha, Petroleum Distillates (naphtha)

CAS number/other identifiers

CAS number : Not applicable.

Product code : Not available.

Ingredient name	%	CAS number
Naphtha Benzene	94 - 100	8030-30-6
Naphthalene	0.1 - 3	71-43-2
Hydrogen sulphide	0.1 - 2	91-20-3
	0.1 - 1	7783-06-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet or water-based fire extinguishers.

Specific hazards arising from the chemical : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Naphtha	**NIOSH REL (United States, 6/2009).** TWA: 400 mg/m³ 10 hours. TWA: 100 ppm 10 hours. **OSHA PEL (United States, 6/2010).** TWA: 400 mg/m³ 8 hours. TWA: 100 ppm 8 hours. **OSHA PEL 1989 (United States, 3/1989).** TWA: 100 ppm 8 hours. TWA: 400 mg/m³ 8 hours.
Benzene	**ACGIH TLV (United States, 6/2013). Absorbed through skin.** STEL: 8 mg/m³ 15 minutes. STEL: 2.5 ppm 15 minutes. TWA: 1.6 mg/m³ 8 hours. TWA: 0.5 ppm 8 hours. **NIOSH REL (United States, 4/2013).** STEL: 1 ppm 15 minutes. TWA: 0.1 ppm 10 hours. **OSHA PEL (United States, 2/2013).** STEL: 5 ppm 15 minutes. TWA: 1 ppm 8 hours. **OSHA PEL Z2 (United States, 2/2013).** AMP: 50 ppm 10 minutes. CEIL: 25 ppm TWA: 10 ppm 8 hours.
Naphthalene	**ACGIH TLV (United States, 6/2013). Absorbed through skin.** STEL: 79 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes.

Section 8. Exposure controls/personal protection

Hydrogen sulphide	TWA: 52 mg/m³ 8 hours. TWA: 10 ppm 8 hours. **NIOSH REL (United States, 4/2013).** STEL: 75 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes. TWA: 50 mg/m³ 10 hours. TWA: 10 ppm 10 hours. **OSHA PEL (United States, 2/2013).** TWA: 50 mg/m³ 8 hours. TWA: 10 ppm 8 hours. **ACGIH TLV (United States, 2/2010).** STEL: 5 ppm 15 minutes. TWA: 1 ppm 8 hours. **NIOSH REL (United States, 6/2009).** CEIL: 15 mg/m³ 10 minutes. CEIL: 10 ppm 10 minutes. **OSHA PEL Z2 (United States, 11/2006).** AMP: 50 ppm 10 minutes. CEIL: 20 ppm

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Naphtha

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

Respiratory protection : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. [Clear to amber.]

Color : Colorless to amber.

Odor : Gasoline; Rotten eggs. / Sulfurous.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : 38°C (100.4°F)

Flash point : Closed cup: -7°C (19.4°F) [Pensky-Martens.]

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : 2-10 psia (Reid VP) @ 37.8°C

Vapor density : >1 [Air = 1]

Relative density : 0.70-0.85 @15.6°C

Solubility : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, reducing materials, acids and alkalis.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha	LD50 Oral	Rat Rat	>5 g/kg	-
Benzene	LD50 Oral	Rabbit	930 mg/kg	-
Naphthalene	LD50 Dermal	Rat Rat	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-
Hydrogen sulphide	LC50 Inhalation Gas.		444 ppm	4 hours
	LC50 Inhalation Vapor		700 mg/m³	4 hours

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Naphtha	Eyes - Mild irritant	Rabbit	-	100 µL	-
	Skin - Moderate irritant	Rabbit	-	500 µL	-
Benzene	Eyes - Moderate irritant	Rabbit	-	88 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-

Sensitization

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Benzene	+	1	Known to be a human carcinogen.	A1	-	+
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.	A4	-	None.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Benzene	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
Naphtha	ASPIRATION HAZARD - Category 1
Benzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : **Carcinogenicity** : Causes damage to organs through prolonged or repeated exposure.
Mutagenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.
Teratogenicity : May cause genetic defects.
No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	46666.7 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure

Naphtha	Acute EC50 3700 to 5100 µg/l Fresh water	Daphnia - Daphnia pulex - Larvae	48 hours
	Acute LC50 3600 µg/l Fresh water	Crustaceans - Gammarus lacustris	48 hours
Benzene	Acute EC50 29000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 1360000 µg/l Fresh water	Algae - Scenedesmus abundans	96 hours
	Acute EC50 9230 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 21000 µg/l Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
	Acute LC50 5.28 ul/L Fresh water	Fish - Oncorhynchus gorbuscha - Fry	96 hours
	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling)	4 weeks
Naphthalene	Acute EC50 1600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 2350 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours
	Chronic NOEC 0.67 ppm Fresh water	Fish - Oncorhynchus kisutch	40 days
Hydrogen sulphide	Acute EC50 62 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus	2 days
	Acute LC50 2 µg/l Fresh water	Fish - Coregonus clupeaformis - Yolk-sac fry	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Naphtha	-	10 to 2500	high
Benzene	2.13	11	low
Naphthalene	3.4	35.5 to 168	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient number	CAS #	Status	Reference
Benzene	71-43-2	Listed	U019
Naphthalene	91-20-3	Listed	U165

Section 14. Transport information

DOT Classification		IMDG	IATA
UN number	UN1268	UN1268	UN1268
UN proper shipping name	PETROLEUM DISTILLATES, N.O.S. (Naphtha, Benzene)	PETROLEUM DISTILLATES, N.O.S. (Naphtha, Benzene)	PETROLEUM DISTILLATES, N.O.S. (Naphtha, Benzene)
Transport hazard class(es)	3	3	3
Packing group	II	II	II
Environmental hazards	No.	Yes.	No.

Naphtha

Section 14. Transport information

Additional information

Reportable quantity
645.16 lbs / 292.9 kg [99.841 gal / 377.94 L]
Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

The environmentally hazardous substance mark may appear if required by other transportation regulations.

AERG : 128

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR**: Naphthalene
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: Benzene; Naphthalene
Clean Water Act (CWA) 311: Benzene; Naphthalene; Hydrogen sulphide

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)

Hydrogen sulphide	0.1 - 1	Yes.	500	-	100	-

SARA 304 RQ : 18181.8 lbs / 8254.5 kg [2813.7 gal / 10651 L]

SARA 311/312

Classification : Fire hazard

Delayed (chronic) health hazard

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Naphtha Benzene	94 - 100	No.	No.	No.	No.	Yes.
Naphthalene	0.1 - 3	Yes.	No.	No.	Yes.	Yes.
Hydrogen sulphide	0.1 - 2	No.	No.	No.	Yes.	Yes.
	0.1 - 1	Yes.	Yes.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Benzene Naphthalene	71-43-2 91-20-3	0.1 - 3 0.1 - 2
Supplier notification	Benzene Naphthalene	71-43-2 91-20-3	0.1 - 3 0.1 - 2

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Naphtha; Benzene; Naphthalene

New York : The following components are listed: Benzene; Naphthalene

New Jersey : The following components are listed: Naphtha; Benzene; Naphthalene

Pennsylvania : The following components are listed: Naphtha; Benzene; Naphthalene

California Prop 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage evel
Naphtha	Yes.	No.	No.	No.
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
Naphthalene	Yes.	No.	Yes.	No.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Ingredient name	List name	Status
PAHs	POPs - Annex 3	Listed

International lists

National inventory

Section 15. Regulatory information

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: Not determined.

Section 16. Other information

History

Date of issue mm/dd/yyyy	: 02/15/2014
Version	: 1
Revised Section(s)	: Not applicable.
Prepared by	: KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Section 1. Identification

GHS product identifier : Butane

Other means of identification : Commercial butane, Liquefied petroleum gas, Normal butane, N-butane

Product type : Liquefied gas.

Identified uses

Liquefied petroleum gas

Supplier's details : Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2488
Email: info@colpipe.com
Web site: http://www.colpipe.com/

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards identification

OSHA/HCS status (29 CFR 1910.1200) : This material is considered hazardous by the OSHA Hazard Communication Standard

Classification of the substance or mixture : FLAMMABLE GASES - Category 1
GASES UNDER PRESSURE - Liquefied gas
GERM CELL MUTAGENICITY - Category 1B
CARCINOGENICITY - Category 1A

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Extremely flammable gas.
Contains gas under pressure, may explode if heated. May cause genetic defects.
May cause cancer.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood. Use personal protective equipment as required. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : IF exposed or concerned: Get medical attention. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

Storage : Store locked up. Protect from sunlight. Store in a well-ventilated place.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : Liquid can cause burns similar to frostbite.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Commercial butane, Liquefied petroleum gas, Normal butane, N-butane

CAS number/other identifiers

CAS number : Not applicable.

Product code : Not available.

Ingredient name	%	CAS number
Butane (containing >= 0.1% butadiene (203-450-8))	95 - 100	106-97-8
Isobutane (Containing >= 0.1% butadiene (203-450-8))	0.1 - 4	75-28-5
Pentane	0.1 - 2	109-66-0
Propane	0.1 - 1	74-98-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Continue to rinse for at least 20 minutes. Get medical attention. In case of contact with liquid, warm frozen tissues slowly with lukewarm water and get medical attention. Do not rub affected area. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. Ingestion of liquid can cause burns similar to frostbite. If frostbite occurs, get medical attention. Never give anything by mouth to an unconscious person.

If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. As this product rapidly becomes a gas when released, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Liquid can cause burns similar to frostbite.

Inhalation : No known significant effects or critical hazards.

Skin contact : Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.

Ingestion : Ingestion of liquid can cause burns similar to frostbite.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
frostbite

Inhalation : No known significant effects or critical hazards.

Skin contact : Adverse symptoms may include the following:
frostbite

Ingestion : Adverse symptoms may include the following:
frostbite

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible,

withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. For incidents involving large quantities, thermally insulated undergarments and thick textile or leather gloves should be worn.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Large spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use.

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Butane (containing >= 0.1% butadiene (203-450-8))	**ACGIH TLV (United States, 3/2012).** TWA: 1000 ppm 8 hours. **NIOSH REL (United States, 6/2009).** TWA: 1900 mg/m³ 10 hours. TWA: 800 ppm 10 hours.
Isobutane (Containing >= 0.1% butadiene (203-450-8))	**ACGIH TLV (United States, 2/2010).** TWA: 1000 ppm 8 hours. **NIOSH REL (United States, 6/2009).** TWA: 1900 mg/m³ 10 hours. TWA: 800 ppm 10 hours.
Pentane	**ACGIH TLV (United States, 2/2010).** TWA: 600 ppm 8 hours. **NIOSH REL (United States, 6/2009).** CEIL: 1800 mg/m³ 15 minutes. CEIL: 610 ppm 15 minutes. TWA: 350 mg/m³ 10 hours. TWA: 120 ppm 10 hours. **OSHA PEL (United States, 6/2010).** TWA: 2950 mg/m³ 8 hours. TWA: 1000 ppm 8 hours.
Propane	**ACGIH TLV (United States, 3/2012).** TWA: 1000 ppm 8 hours. **NIOSH REL (United States, 1/2013).** TWA: 1800 mg/m³ 10 hours. TWA: 1000 ppm 10 hours. **OSHA PEL (United States, 6/2010).** TWA: 1800 mg/m³ 8 hours. TWA: 1000 ppm 8 hours.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. If contact with the liquid is possible, insulated gloves suitable for low temperatures should be worn. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquefied gas. [Clear.]

Color : Colorless.

Odor : Petroleum.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : -1°C (30.2°F)

Flash point : Closed cup: -73°C (-99.4°F) [Pensky-Martens.]

Evaporation rate : >1 (Butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : 2-10 psia (Reid VP) @ 37.8°C

Vapor density : 2 [Air = 1]

Relative density : 0.70-0.85 @ 15.6°C

Solubility : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow gas to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials and acids.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Butane (containing >= 0.1% butadiene (203-450-8))	LC50 Inhalation Vapor	Rat	658000 mg/m³	4 hours
Isobutane (Containing >= 0.1% butadiene (203-450-8))	LC50 Inhalation Vapor	Rat	658000 mg/m³	4 hours
Pentane	LC50 Inhalation Vapor	Rat	364 g/m³	4 hours

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Isobutane (Containing >= 0.1% butadiene (203-450-8))	-	-	-	-	-	None.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Pentane	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

Name	Result
Pentane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Section 11. Toxicological information

Potential acute health effects

Eye contact : Liquid can cause burns similar to frostbite.

Inhalation : No known significant effects or critical hazards.

Skin contact : Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.

Ingestion : Ingestion of liquid can cause burns similar to frostbite.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following: frostbite

Inhalation : No known significant effects or critical hazards.

Skin contact : Adverse symptoms may include the following: frostbite

Ingestion : Adverse symptoms may include the following: frostbite

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : **Carcinogenicity** : No known significant effects or critical hazards.

Mutagenicity : **Teratogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

May cause genetic defects.

No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Butane (containing >= 0.1% butadiene (203-450-8))	2.89	-	low
Isobutane (Containing >= 0.1% butadiene (203-450-8))	2.8	-	low
Pentane	3.45	171	low
Propane	1.09	-	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty pressure vessels should be returned to the supplier. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

DOT Classification		IMDG	IATA
UN number	UN1011	UN1011	UN1011
UN proper shipping name	BUTANE (Butane (containing >= 0.1% butadiene (203-450-8)), Isobutane (Containing >= 0.1% butadiene (203-450-8)))	BUTANE (Butane (containing >= 0.1% butadiene (203-450-8)), Isobutane (Containing >= 0.1% butadiene (203-450-8)))	BUTANE (Butane (containing >= 0.1% butadiene (203-450-8)), Isobutane (Containing >= 0.1% butadiene (203-450-8)))
Transport hazard class(es)	2.1	2.1	2.1
Packing group	-	-	-

			Butane
Environmental hazards	No.	No.	No.
Additional information	-	-	-

: **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

AERG : 115

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
: Not available.

Special precautions for user

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR**: Pentane

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act (CAA) 112 regulated flammable substances: Butane (containing >= 0.1% butadiene (203-450-8)); Isobutane (Containing >= 0.1% butadiene (203-450-8)); Pentane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
Sudden release of pressure
Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard

Butane (containing >= 0.1% butadiene (203-450-8))	95 - 100	Yes.	Yes.	No.	No.	Yes.
Isobutane (Containing >= 0.1% butadiene (203-450-8))	0.1 - 4	Yes.	Yes.	No.	No.	Yes.
Pentane	0.1 - 2	Yes.	No.	No.	Yes.	No.
Propane	0.1 - 1	Yes.	Yes.	No.	No.	No.

: The following components are listed: Butane (containing >= 0.1% butadiene (203-450-8)); Isobutane (Containing >= 0.1% butadiene (203-450-8)); Pentane

State regulations

Massachusetts

New York **:** None of the components are listed.

New Jersey **:** The following components are listed: Butane (containing >= 0.1% butadiene (203-450-8)); Isobutane (Containing >= 0.1% butadiene (203-450-8)); Pentane

Pennsylvania **:** The following components are listed: Butane (containing >= 0.1% butadiene (203-450-8)); Isobutane (Containing >= 0.1% butadiene (203-450-8)); Pentane

California Prop 65

No products were found. **International regulations** **Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: All components are listed or exempted.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: Not determined.

Section 16. Other information

History

Date of issue mm/dd/yyyy	: 02/15/2014
Version	: 1
Revised Section(s)	: Not applicable.
Prepared by	: KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notjce to reader
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Colonial Pipeline Company
RELEASE RESPONSE STRATEGIES

INTRODUCTION

Colonial Pipeline Company transports gasoline, kerosene, diesel fuel, aviation kerosene, and transmix. All of these refined petroleum products have a specific gravity of less than one (float on water) and are biodegradable. The U.S. Coast Guard considers these products as Class "A" oils, having a low viscosity and high volatility. This results in the oil rapidly spreading on the water surface and subsequent increases in evaporation rates.

This section addresses release preparedness and response strategies associated with the types of products transported by Colonial Pipeline. This information, used in conjunction with the MSDS information in Section 9.01, should be used to affect safe and effective responses to release material.

RECONNAISSANCE

One of the most important functions during the initial stages of release response is reconnaissance of the affected line segment and area of impact. As with any aspect of the response effort, **safety and the protection of human life are the primary concerns**. This is true for both persons located in the area of the release and responders performing recon operations. In addition to safety issues, recon personnel should be aware of measures to mitigate the consequences of the release.

Reconnaissance strategies and techniques are dependent on the weather and time of day. These factors largely dictate the use of aerial support in any response effort. Aerial support enhances the response effort by helping to obtain an overall picture of the extent of the release quickly so that adjustments to the response effort can be made as soon as possible. Ground level recon activities should be conducted immediately regardless of the weather or time of day. While aerial recon gives you the big picture, ground recon provides the important details.

The following is some general guidance on recon strategies and checklists on information to collect and useful equipment/supplies for conducting recon activities:

Preplanning

Preplanning is essential to an effective recon operation due to the diverse geographical nature of the pipeline. The following preplanning items should be taken into consideration:

- Preplanning should be performed/coordinated by personnel most familiar with the line segment for which the plan is being developed.
- All personnel likely to be involved with the planning and actual recon activities should be familiar with available reference maps and information, especially the USGS maps and associated data tables for predetermined oil containment/recovery locations.
- Recon personnel should be trained in the use of communications equipment that may be used.
- A tracking method to monitor the efforts of recon personnel to provide effective coverage when trying to locate the origin and down gradient extent of released product should be developed.
- Recon personnel should be trained in relevant safety aspects associated with recon activities. These include knowledge of the product that may be released and necessary monitoring for those

products, as well as the precautions that must be considered with respect to geographical features, weather, wildlife, and other dangers that may be present in a particular area.

- Available trained recon personnel should be identified.
- Natural and man-made barriers that may interfere with recon of a particular line segment (e.g. fences, secured properties, waterways, wetlands, cliffs, etc.) should be identified.

Reconnaissance Operations - General Guidance

Below is some general guidance that should be considered during recon activities:

- Make safety the priority.
- Develop a buddy-system for responders performing recon activities.
- Establish and maintain communication with the Atlanta Control Center. This communication will in most cases significantly reduce the search area and help locate the release more quickly.
- Establish a clear communications network prior to dispatching personnel to recon areas.
- Designate personnel to establish a mechanism for tracking personnel performing recon (e.g. recon personnel to contact command center hourly to give progress report).
- Secure proper supplies for documentation purposes. As a recon area is entered, record geographical features that may have an impact on upcoming containment, recovery, and cleanup operations.
- Personnel performing the recon should monitor the air with appropriate devices (e.g. combustible gas meter, oxygen content meter, and Sensidyne colorimetric indicator tubes). This is especially important if the release is suspected to include gasoline.

Initial Reconnaissance Strategies - No Aerial Support

Aerial recon provides the most efficient method of locating the release site and extent of affected areas. Aerial recon, however, may not be immediately available due to variety of reasons (e.g. weather conditions, darkness, availability of planes/helicopters/pilots). Regardless of the availability of aerial patrol, ground recon operations are an essential element. The tactics and magnitude of the initial recon efforts will depend on available manpower and site conditions. Below is guidance for conducting ground recon activities:

- Typically, the Atlanta Control Center will initially be able to identify between which two pump stations the release occurred, or a third party will call in with a more precise location. After Control Center personnel have analyzed pressure charts they can generally locate the site to within approximately five miles.
- If the release location has been tentatively identified, recon personnel should be dispatched to both the suspected leak location and to down gradient water access points.

- Two recon personnel should be sent to the suspected location of the leak site. If the leak is not found at this location then one should proceed downstream and the other upstream towards the closest pump station. If a pump station or other facility is nearby, recon personnel should first check the facility unless otherwise instructed. If the terrain is too hazardous or difficult for a foot recon effort, these conditions should be relayed to the Incident Command Center, and a search of nearby pipeline road crossings should be initiated. As recon personnel reach the suspected leak site or pump station, they should report their findings to the Incident Command Center.

- Water access points are those locations that are adjacent to or spanned by a road. The predetermined containment and recovery sites marked on the USGS maps should be visited. The order in which waterways are visited should be based on sensitivity of the waterway and when product would be expected to reach a given location. The expected time of arrival is based on the time elapsed from when the leak occurred and the estimated flow rate of the waterway. Recon personnel should report in to the Incident Command Center as soon as they have completed their inspection of each water access location. The water access points may need to be visited more than once. Product may be in the waterway, but still upstream of the access point when it is visited.

- If the release location is only known to be between two pump stations, more focus should be given to visiting water access points.

- The number of recon personnel needed to adequately cover the down gradient water access points will depend on the number of locations, but at least four people should be used. If possible the recon personnel should work in teams of two so that if product is encountered at a crossing, one of the responders can stay at the crossing to protect the public and assist additional responders find the site. The other person should continue to try to get ahead of the product and then work back toward the other site. If recon cannot be performed in pairs, then as product is found at crossings, the decision must be made whether to leave this site and continue recon activities, or stay at this site. The decision should be based on the potential danger to the public if the site is left unmanned until additional responders arrive. This will have to be determined on a case-by-case basis.

- Once the release site has been confirmed, it is imperative that the Incident Command Center be immediately notified so other recon personnel can be sent to potential containment/recovery locations.

Initial Reconnaissance Strategies - With Aerial Support

Initial aerial reconnaissance support techniques are used in conjunction with all ground level recon efforts.

- Helicopters and fixed wing aircraft should be used to assist in recon activities. Helicopters provide the best recon capabilities due to their design and should be utilized whenever possible.

- At least one helicopter should be secured for recon duties as soon as possible and the pilot given specific directions where to report to pick up Colonial recon personnel. The nearest Colonial patrol pilot should also be immediately contacted and dispatched, if possible, to the suspected release site.

- Appropriate communications should be established between the helicopter, Colonial patrol plane, and the Incident Command Center.

- Two people, if possible, should go on the initial helicopter flight so that if the leak site is found, one person can be dropped off at the site to protect the public, begin collecting and relaying important information to the Incident Command Center, and help additional responders locate the site. After the person is dropped off at the leak site, the helicopter and other recon person should follow the plume of product down gradient relaying important information back to the Incident Command Center. The recon person in the helicopter should help the ground recon teams by directing them to containment and recovery points. After the farthest point of the plume of product is reached, the helicopter should continue to recon downstream to select the last containment and recovery site (the Last Stand).

- It is important to remember that the total number of recovery sites will greatly impact the staffing of the individual sites. Although the number of recovery sites will depend on the size of the release and conditions in the water body, identification of 3-4 sites is a good starting point. The helicopter recon person should be able to determine the locations of the most effective sites. More sites can be added as needed as resources arrive at Staging.

- After the initial recon, at least one helicopter should be retained for continuing recon duties throughout the emergency response.

- The initial duty of the Colonial patrol pilot is to fly towards the suspected leak site to locate the site. Once the leak site has been found the patrol plane should fly the right-of-way on both sides of the leak site to a predetermined point. This is to ensure the integrity of the remaining segment of line (i.e. make sure there is only one leak site). After this is done, the company pilot should report to the Incident Command Center for further instructions on how to supplement and coordinate the response's aerial support efforts.

Important Information to Collect

Listed below is pertinent information that should be collected during recon activities:

- Location of release site, type of product, site characteristics (woods, wetlands, open field, etc), and access (nearest roads).
- Location of leading edge of product.
- Extent of impact (e.g. area of coverage, product thickness).
- Stream/river velocities of each segment.
- Approximate depth and width of stream/river segments and identify pertinent characteristics such as pools, swamps, swift currents, etc.
- Wind speed and direction.
- Natural (e.g. log jams, ice) and manmade structures (e.g. dams) that are in the path that will retard or block the flow of product.
- Potential containment/recovery locations.
- Site access to potential containment/recovery locations.
    - Will the pathways to the site support fully loaded tank trucks or will roads need to be built or mats installed?
    - Is there room for several trucks/frac tanks to be staged?
    - Is there room for trucks to turn around?

  - Will a large quantity of pipe or hose be needed to transport the recovered product to the loading area?
  - What is the elevation difference between the water and the loading area?
- Potential hazard areas (e.g. sources of ignition in path of product).
- Areas that may require evacuation.
- Threatened sensitive areas that will need protective booming (e.g. wetlands, boat docks, coves).
- Approximate length of boom required at each potential containment site and what type of equipment is necessary to deploy it.
- Potential underflow dam locations and how much of what diameter flume pipe is needed.
- Locations of visible wildlife/livestock.
- Effectiveness of presently deployed booms and necessary adjustments.
- Estimated volume of product pooled behind each containment site.
- Location of pockets of product that are stranded beyond the river banks.
- Information on manpower or equipment shortages at recovery sites.

Recommended Recon Equipment/Supplies

The following equipment and supplies may be useful for performing recon duties:

- Cameras (Smartphone, Polaroid, camera that inscribes date/time on photos, video camera)
- USGS topographic maps (several photocopies on which to mark pertinent information) and accompanying data sheets for preplanned containment/recovery sites
- Pipeline alignment sheets
- Local road maps (command center should have an atlas/mapping software (e.g. DeLorme's Map Expert)
- Compass
- GPS unit
- Minerva (instrument to measure lengths of curved lines on maps)
- Tape measure and product/water gauge paste
- Water velocity meter or stop watch
- Communications equipment (Satellite phone, hand held radio, cellular phone)
- Binoculars
- First aid kit
- Tyvec suits, gloves, goggles
- Ear plugs, eye wash, insect repellent
- Flashlight
- Weather proof log books, pens, and permanent markers
- Machete, utility knife

General Inspection Procedures for the Detection of Petroleum Hydrocarbons

The following inspection procedures can be used to determine if a subsurface release of petroleum hydrocarbons which is impacting a surface water has occurred. Colonial Pipeline transports gasoline, kerosene, and fuel oils. These materials have a specific gravity less than one, and therefore will float on water. Petroleum hydrocarbons released into the subsurface can be discharged into surface waters which are recharged by groundwater or be transported above grade following heavy rains. The primary indications that petroleum hydrocarbons are present are the following: 1) odors, 2) biological growth (algae blooms), or 3) hydrocarbon sheens.

In general, the type of odor detected from a hydrocarbon release will vary depending on how long ago the leak occurred. As expected, a recent release would have an odor similar to that of “fresh” product. A petroleum product that has aged and is discharging to surface water can develop an odor similar to that of paint thinner or a “skunk” type odor. Typically, the strongest hydrocarbon odors can be detected in low areas. This is because the petroleum vapors are heavier than air and will migrate to the lowest elevation. It should be noted that other environmental factors have an effect on the ability to detect petroleum hydrocarbon odors (i.e. wind and temperature).

Surface water that is being impacted by petroleum hydrocarbons will often have an unusually large amount of biological growth associated with it. The most common indication of this is an algae bloom. Generally, the algae are filamentous, and are usually orange/red/rust in color. It should be noted that after a heavy rainfall the algae can often be washed away by swift flowing waters.

A third indication that surface water is being impacted by petroleum hydrocarbons is the presence of hydrocarbon sheens. A true hydrocarbon sheen will show a rainbow if stirred or swirled. Following agitation, the sheen will reform a layer of uniform thickness. If oil absorbent materials are available, they can be used to help confirm if the material is actually an oil product. Hydrocarbon sheens are easily confused with biological iron sheens upon first impression. Biological sheens typically occur in stagnate or slow moving water. Unlike hydrocarbon sheen, a biological sheen will break up into angular fragments if stirred and not reform.

It should be noted that the causes of the above indications are not limited to subsurface discharges of petroleum hydrocarbons. Other processes can result in similar observations. These can include urban storm water runoff and naturally occurring biological processes. Therefore, if any of the above indications are observed, additional assessment will be warranted to determine the source.

RELEASE CONTAINMENT SITES

Whenever possible, access to containment sites and the location of oil and gasoline releases should be via existing pipeline facilities such as pipeline right of way, haul road, pipeline facility, access roads, river or stream access, or by state, federal, and private roadways. While these facilities should be utilized to their fullest potential, off-road operations of varying degrees may be required. The impact of off-road operations can be limited by identifying and using old survey trails, fire breaks, and other potential access routes. Because these disturbed areas can be sensitive to erosion, care should be exercised when using these off-road routes.

Each site should be staffed with a minimum of five Colonial representatives (a site commander, safety monitor, technician, runner/communications assistant, and accountant).

ACCESS TO RELEASE SITES

Access to release sites via other than right-of-way or public roads is to be cleared with the affected property owner or the owner's representative. Also, if the release site is on property adjacent to navigable waters, it may be necessary to obtain a work permit from the United States Coast Guard before clean-up and repair operations begin.

Delineation of Boundaries

Selected sensitive areas are delineated on USGS topographic maps showing contributory drainage ditches or dry washes, contributory creeks, main river courses, lakes, ponds, marshlands, any city or community water intakes or commercial cooling water intakes. These areas are sensitive year round. Access to these sites may also be determined by referencing the USGS maps.

Encroachment

Every reasonable effort should be taken to notify property owners or tenants before entering property.

The areas sensitive to surface disturbance are likely to create severe problems of erosion and re-vegetation. It is recommended that these areas be avoided. However, it is understood that certain situations may develop that dictate encroachment within sensitive areas. A gravel access road or combination earth and wooden plank access road should be constructed across large wetland or marsh areas. At a minimum, approval should be sought from the Incident Command Center prior to moving into wet or marshy areas.

If encroachment on a surface sensitive area is required, protective measures should be taken so disturbance is minimized. Measures should include the following actions:

- Only trees and shrubs that physically impede surface travel should be cut.
- Trees and shrubs that are removed should be cut flush with ground and not pushed over.
- When access routes follow drainage ditches, a buffer zone should be established along the ditch.
- When access is required to cross drainage ditches, incised banks should be completely restored and vegetation established.

Criteria For Selecting Release Containment Sites

Pre-planned containment sites are an essential component of control actions. While most of these pre-planned sites have been located on small drainages and points of confluence, containment sites can be constructed on suitable terrain away from drainages. This would be particularly useful in intercepting product near the pipeline or between pre-planned containment sites. The criteria established for selecting additional product containment sites are:

- River and stream characteristics
- Man-made structures
- Topography
- Access to site and proximity to sensitive areas
- Potential release volume
- Time of response

River and Stream Characteristics

The selection of containment sites within rivers and streams must be accomplished with consideration given to flow characteristics.

Important characteristics to be considered are:

- Level of hazard and training of responders
- Environmental impact
- Velocity of stream or river
- Discharge and flow characteristics
- Channel conformation (width, depth, pool riffle ratio)
- Man-made structures (culverts, spur dikes, bridges, canals, low water crossings)
- Side channels and backwater areas
- Presence of ponds adjacent to stream
- Bank vegetation
- Storage areas for recovery

Man-made Structures

Bridges, culverts, spur dikes, and low water crossings provide ideal access points where dikes, berms, or other diversions can be installed to slow water velocities and facilitate containment procedures.

Site Security

(b) (3), (b) (7)(F)

[redacted]

Potential Release Volume

The volume of the release must be considered in selecting containment sites. This volume may be used in conjunction with local topographical data and river/stream characteristics to evaluate suitability of sites.

Time of Response and Selection of Containment Sites

Response time is a consideration in the selection of containment sites. Factors to consider include the size of release, time necessary for product to reach a watercourse, and flow velocity. In all instances, containment of product is more critical than trying to intercept the leading edge. When weather or transportation problems delay response time or in the event of a release directly into flowing water, duplicate sites may be required.

Knowledge of local topography aids containment site selections. Topographic maps can indicate natural terrain features, such as depressions, ravines, and dry washes that could lend themselves to constructing containment sites. Topography must be considered when estimating the storage capacity of a potential site, planning access routes for operations (containment, clean-up, disposal), and assessing the speed at which product could reach a containment site.

INITIAL RESPONSE PROCEDURES AND CONTAINMENT AND EXCLUSION STRATEGIES

Initial Procedures

Upon confirmation of a release, Colonial must make an initial assessment to determine the material and volume of the release. This assessment is usually completed by the Atlanta Control Room Shift Supervisor. As part of this initial assessment, it is necessary for Colonial field personnel to determine the geographical and environmental factors of the area surrounding the release in order to plan the proper protective and remedial measures. Guidelines for determining whether an environment is sensitive are presented in the next section. The steps for the ascertaining the environmental impact of the release are as follows:

Release site: Investigate the release location and the natural areas already impacted to determine the extent of damage. Determine if any immediate actions at the scene can minimize further damage. At the release site, Colonial Personnel should determine the direction and rate of the flow. Steps should be taken to control the source of material and to contain the release if possible.

Areas of immediate danger: Following the assessment of the release site, Colonial representatives should examine the areas immediately downstream or adjacent to the release. Although these areas may not have been affected by the release, they are in immediate danger of contact with the release. (***Immediate danger can be defined as impact occurring in a matter of hours.)*** If sensitive areas are located, then preemptive measures should be taken to minimize the impact of the release prior to contact. This includes, but is not limited to, deployment of boom, and/or construction of dams or other diversion measures to lessen the impact prior to contact with the released material.

Areas of potential danger: While steps are being taken to control the spread of the release, Colonial shall conduct a reconnaissance to determine what other sensitive areas might be affected if the release continues downstream. If sensitive areas are located, provisions shall be made to protect these areas. Preparation should be made for the deployment of additional cleanup resources as necessary.

Secondary Procedures

Once a sensitive area has been identified and protective measures have been taken, the Colonial On-Scene Coordinator (OSC) shall monitor the integrity and effectiveness of these measures. A minimum daily inspection will be carried out to ensure that the protective measures are holding and that no additional measures are required. The Colonial OSC will also monitor the ecological health of the threatened area.

GENERIC CRITERIA

The following is a partial listing of potentially sensitive environmental and/or economic areas:

Environmental

A. **Wetlands:** Marshes, swamps, and other areas where water flow is usually slow and has a high occurrence of vegetation. These areas support a large amount of species diversity and are often used as breeding grounds.

B. **Endangered species:** Areas that contain endangered species, both flora and fauna, exist throughout the Colonial pipeline system. These species are often found in well-defined preserves, but they may also exist in small remote populations. For example, in the state of Georgia, a species of river lily exists in only one location, a sand bar in the middle of a particular river.

C. **Critical habitat:** These areas support communities of animals and plants that may not come into direct contact with the released material, but nonetheless rely on the waterway for food, habitat, or breeding grounds. If a river becomes contaminated sources of drinking water and food for upland species may be affected.

D. **Natural areas:** These are areas which possess value as a whole ecosystem. They may not contain endangered species, but are representative of the ecosystem in its most natural state. Examples of these areas are outlined in the Outstanding Rivers List and the List of Wild and Scenic Rivers. Information on environmentally sensitive areas, including natural areas, can be found by querying the Colonial GIS accessible through the Colonial Pipeline intranet homepage.

A Job Aid that provides links to Environmentally Sensitive Area information is available at the following link:

http://colonialhome.colpipe.com/environmental/ERP/ICS/ERP%20Resources%20and%20References.xls

Although some information in this Job Aid is only available in GIS/metadata formats, other information can be displayed through interactive maps useful for responders having internet access during a response.

CHARACTERISTICS TO DETERMINE AND IDENTIFY SENSITIVITY

The following factors are to be utilized in determining sensitivity of an area. These factors are not the only criteria for determining sensitivity, but are presented here to provide a general formula.

Environmental Factors

A. **Geography**: Examine the position of the river or waterway. River and lake characteristics differ whether they are positioned in crystalline rock (e.g., Piedmont) of the eastern U.S. and the carbonates of Tennessee, or the Coastal Zone. The crystalline rock lies above the fall line and the associated waterways are distinguished by shallow, fast-flowing rivers which usually have many changes in direction. The forest surrounding a crystalline rock river consists predominately of hardwood trees and the land slopes sharply to the river. Below the fall line, in the Coastal Zone, the rivers straighten and widen with a steady flow. The land around the river has a more gradual slope.

   Many of the larger lakes along the pipeline have been developed by the construction of dams along rivers. These areas are widely used by communities for water supply and/or recreation and a release can significantly affect these activities. Conditions vary whether a waterway is a tributary stream or major river. Tributaries are usually not as fast-flowing as major rivers and are often used as breeding grounds for aquatic wildlife. Also, tributaries do not “flush out” as fast as major rivers and release material may collect in pools or eddies.

B. **Season**: Water flow, and the dispersion of flora and fauna, varies widely with the season. Responders should determine what species and habitats are more susceptible based on the time of the year. In the winter time, vegetation is dormant and less vulnerable than in the summer growth

seasons. The animal communities found in and around a waterway also differ in members and numbers throughout the year.

C. **Habitat**: The types of habitat that may support endangered species are not uniformly distributed on rivers, even those rivers which are similar. The potential for sensitive habitats can be evaluated by determining the amount of development present on the river, the impact of past releases, or whether the location could be considered pristine.

D. **List /Maps:** Consult the Colonial Pipeline Company Spill Response Maps, Environmentally Sensitive Areas, and Areas of Concern information available through the Colonial GIS. The Release Response Maps and associated GIS information provides areas of rivers, state and federal forests and parks, and State and National Wildlife areas. Consult state and federal historic preservationists and wildlife authorities for detailed information for site that could be affected immediately by a release or as the response progresses.

E. **Local Resources**: Determine what local sources of information are available for the area of the release. Consult State Heritage Programs or local conservation groups for detailed information concerning impacts a release might have on the areas biological systems.

F. **On-Scene Conditions**: Use ones' own observation and the information gathered by advance teams to determine areas of potential impact. Conduct reconnaissance of waterways to determine what areas are likely to be sensitive. All releases have different components, as do all ecosystems and natural habitats. Use all information available to determine the best method for determining the most effective strategy for protecting sensitive environments.

Economic

Economically sensitive areas determined by the *Oil Pollution Act of 1990* include public drinking water intakes which are listed in Section 9.06. These facilities are located on the shores of streams or rivers used as a municipal water source. These intake points can be located by consulting the Colonial Spill Response maps, or by contacting the agencies concerned with local water supply (See Section 2.04 and 5.03).

These agencies should be notified of the release as soon as possible and advised to prepare for the protection of the municipal water intakes. Additional protection measures may have to be undertaken to prevent the contamination of the local drinking water supply.

A Job Aid that provides links to Economically Sensitive Area information is available at the following link:
http://colonialhome.colpipe.com/environmental/ERP/ICS/ERP%20Resources%20and%20References.xls

Although some information in this Job Aid is only available in GIS/metadata formats, other information can be displayed through interactive maps useful for responders having internet access during a response.

GENERAL RESPONSE STRATEGIES

Methods of exclusion and containment may be used in the following situations:
(More than one method may be used in each situation.)

- Pipeline right of way and access roads
- Small creeks, ponds, and swamp area
- Highways
- Large rivers and floodplains
- Large lakes

Pipeline Right of Way and Access Roads

Workspace constructed parallel to the pipeline and existing access roads can be utilized to block the flow of product in areas down gradient from the pipeline. Exercise caution not to damage the pipeline, coating, or other nearby utilities. Drainage structures through the roads will need to be blocked with earth and polyethylene sheathing, and/or plywood and sandbags.

At some locations, interception trenches can be excavated to divert or contain product. These may have to be lined with an impermeable material. Trenches can be dug and barriers placed in the vegetative mat to limit subsurface product migration, possibly in conjunction with sorbent material and impermeable liners.

Small Creeks, Ponds and Swamp Areas

Small creeks can be entirely blocked by damming if there is sufficient area upstream. However, a means of stopping the product and letting the water continue downstream will generally be required. Underflow dams and overflow berms or a dam in conjunction with a pump or siphon, may be used for this. These barriers should be located so that a pond will form upstream from the barrier, allowing the use of sorbents, booms, and skimmers. In addition, pools may exist behind log and debris jams where containment could be achieved. On fast flowing creeks, a series of containment barriers such as filter fences using hardware cloth or chicken wire structures (with sorbents) should be used. It may be necessary to remove logs and other debris in creeks and streams to allow effective deployment and maintenance of booms or to allow product to flow freely. It may also be necessary to install steel nets, chicken wire, or similar devices upstream of containment devices in order to protect both equipment and personnel. To facilitate cleanup and removal, the product should be diverted to an area with adequate storage.

On ponds, the outlet should be boomed to let the product collect on the surface of the pond. Additional booms should be deployed around the slick to prevent it from contaminating the shoreline. Sorbent booms and conventional booms deployed in tandem can be effective, with both booms deployed across the pond outlet. Sorbent booms should be farther downstream to collect portions of the product that may have passed the conventional boom. Sensitive areas along creek banks and shorelines can be protected by the appropriate booming strategy.

Containment in wet and swampy areas will be limited to interception with barriers and sorbent materials. Swamp areas will not generally support mechanized equipment. Action in these areas will be limited and usually have to be accomplished by hand and/or with the use of boats.

Highways

Highways and roads can serve as important containment barriers if the culverts passing beneath them are blocked. Most culverts are two feet or less in diameter and can be blocked with sand bags, sheets of plywood, or earthen material. Larger culverts and some smaller ones transporting large volumes of water will require an underflow device. Where a large volume of product is involved and/or inadequate storage capacity exists on the side of the highway, it may be advantageous to allow all or part of the release to pass beneath the highway or roadway to a down gradient area with sufficient storage capacity. Dams should be constructed across the bar ditch to provide containment.

Where there is no bar ditch, or where the highway is not elevated, product may pass over the highway if it is not blocked. Material present on the road shoulder will usually contribute to blocking product flow.

Floodplains

Product approaching a floodplain should be blocked at the point of entry (contained within the drainage course). It is particularly important to have berms constructed between the release and the main river channel or water course. Underflow devices should be used if there is flowing water. Diversion berms can be built using booms to direct the product to a floodplain (side channel, abandoned meander or channel, or an excavated diversion pit). Floodplain debris can be used as containment barriers. Logs on sand or gravel bars and side channels create pools where product can be contained. Berms should be constructed downstream from the debris to act as a backup containment barrier.

Large Rivers

Releases on a main river channel will be difficult to contain but can be addressed in several ways. During periods of high stream flow and velocity, a series of diversion berms and booms should be used to divert the product to a containment pit or floodplain. On smaller creeks or rivers, digging a trench to create eddies and calm water can create a recovery area. This technique is more effective when used in conjunction with an overflow dam directly downstream. The pit should be located where rapid removal of the product is possible. The usefulness of booms on fast flowing large rivers is limited. However, they can be deployed in containment pits upstream from natural or created pools and near sandbars. Product should be removed from behind the boom as rapidly as possible to prevent bypassing. Product entering the river can be partially controlled by deploying booms parallel to the river bank downstream from the point of entry. Under some circumstances, side channels could be converted to containment ponds utilizing the following procedures:

- Berm or dike the downstream end of the side channel.
- Construct a suitable channel for a diversion skimmer in conjunction with an overflow berm that diverts the product into the mouth of the side channel and allows the majority of water to flow down the main channel.
- Under most circumstances, containment barriers will have to be continually maintained. Their resistance to erosive forces can be increased if the upstream portion of the earth barrier is covered with large pieces of heavy material such as rock rip rap or polyethylene sheathing.

Large Lakes

Booms are the most useful means of containment on large lakes. The most effective technique is to encircle the product with booms and direct, or herd, it to a recovery site with slow moving boats. During high water periods, debris moving into the lake area should be removed from behind the boom. Constant monitoring is essential to maintain booms and ensure product containment.

If product is flowing into the lake, a boom should be secured to the shore on one side of the point of entry and deployed around the perimeters of the slick by boat until the product is encircled. Conventional booms and sorbent booms deployed in tandem may be effective. Deploy both across the lake outlet with the sorbent boom downstream or behind the conventional boom. Sorbent pads can be distributed between the two booms. This technique will pick up product that passes the primary boom.

METHODS OF CONTAINMENT AND EXCLUSIONS

The following are methods that can help limit the spread of released product or to exclude it from sensitive areas. These can be implemented individually or in combination.

- Dams
- Berms (Dikes)
- Culvert blocking
- Interception barriers
- Sorbent and Trash Fences
- Booming

Since some of these techniques involve removal or disturbance of vegetative cover, it must be taken into account that many of the soils along pipeline routes are extremely sensitive and that such disturbance can cause hydraulic erosion. The Contingency Plan recommends precautions to prevent erosion and to completely restore soil and vegetation in disturbed areas, or the use of sound rip rap such as stone, hay or timber where applicable.

A second factor to consider when evaluating containment techniques at a specific site is the availability of on-site storage for contained or diverted product. In order for any containment technique to be effective, it is essential that the product be stored or removed from behind the containment or diversion device. The area where product is being diverted must be capable of storing all the material in a location where it may later be recovered. The same precaution holds true for product being stored up gradient from a containment device or structure.

Dams

There are two types of dam construction appropriate for product containment: The complete blocking of an actual or potential drainage course (a blocking dam) and the blocking of the product flow while letting water continue down-slope (an underflow dam).

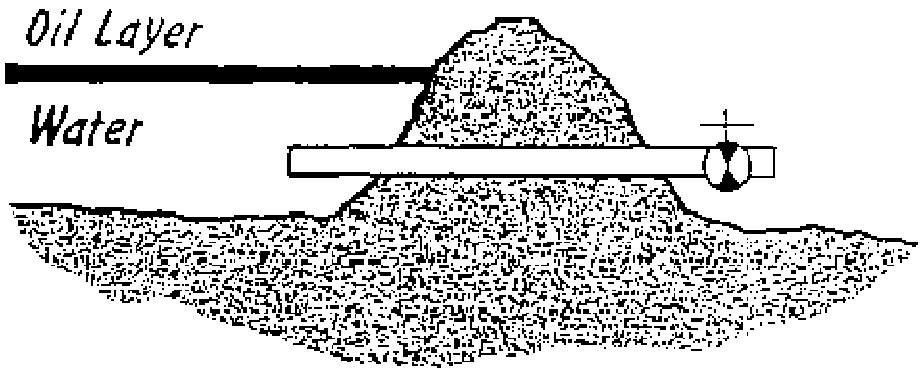
Blocking Dams: Blocking dams should be constructed only across drainage courses which have little or no water flow. The dam should be situated at an accessible point where there are high banks on the upstream side. It must be well keyed into the banks and buttressed to support the back pressure. It can be constructed from several types of materials - earth, sand or earth bags, sheets of metal or wood, or any material that blocks flow. Approval should be obtained for use of off-site material for control actions.

Other materials can be improvised from portions of the right of way.

The dam can be built across the drainage course to form a holding pond or reservoir to contain the released product and water. Water trapped behind the dam can be pumped out by placing a suction (intake) hose at the base of the dam on the upstream side, leaving product trapped behind the dam for subsequent removal. The discharge (outlet) hose should be placed on the downstream side. Trapped water can also be removed across the dam with one or more siphons.

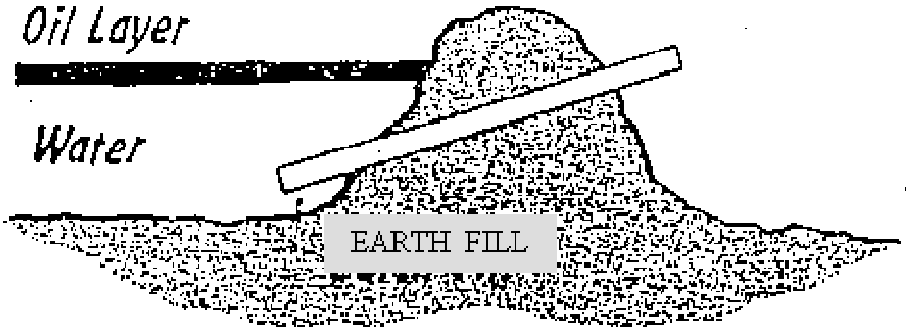
Underflow Dams: An underflow dam may be used for waterways with higher flow rates. If the dam is to be effective, the product/water interface must be above the top of the underflow opening. To maintain the proper level, it is necessary to remove some of the water through horizontal or inclined pipes, preferably with valves.

The underflow dam can be constructed by placing pipes of appropriate size on the stream bed and building an earthen or sandbag dam over the pipe across the waterway. The diameter of the pipe will depend on the flow rate of the stream and the depth of the water behind the dam. For example, 24" to 30" diameter pipe will have sufficient capacity for a flow rate of up to thirty cubic feet per second. A pair or series of dams may be required downstream if sufficient underflow cannot be maintained.



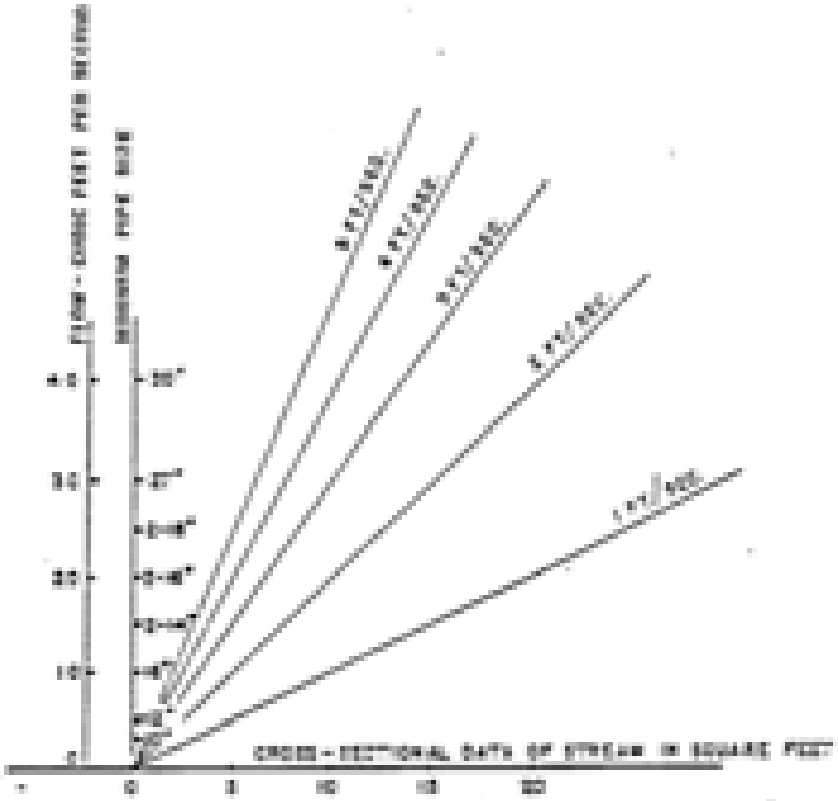
CREST OF DAM SHOULD BE OF SUFFICIENT WIDTH TO ACCOMMODATE COMPACTION VEHICLE. HEIGHT OF FILL IS 2 TO 3 FEET ABOVE FLUID LEVEL. NORMAL FALL ANGLE OF FILL WILL SUFFICE FOR SLOPING.

WATER BY-PASS DAM (VALVED PIPE)



WATER FLOW OF STREAM IS BY-PASSED TO MAINTAIN RESERVOIR LEVEL. ELEVATE DISCHARGE END OF TUBE(S) TO DESIRED RESERVOIR LEVEL.

WATER BY-PASS DAM (INCLINED TUBE)



PIPE SIZE IN INCHES	EQUIVALENT NUMBER OF PIPES													
	4	6	8	10	12	14	16	18	20	24	27	30	36	
36	81	36	20	13	9	7	6	4	4	3	2	2	2	1
30	40	30	15	9	7	5	4	4	3	2	2	2	1	
24	40	16	9	6	4	3	3	3	2	2	1			
18	21	9	6	4	3	2	2	2	1					
16	16	8	4	3	2	2	2	1						
14	13	6	4	2	2	1								
12	9	4	2	2	1									
10	7	3	2	1										
AREA IN SQ. FEET	[illegible]													

NEETED PIPE AREA [illegible]

WATER BY-PASS DAM (PIPE SIZE CHART)

Berms

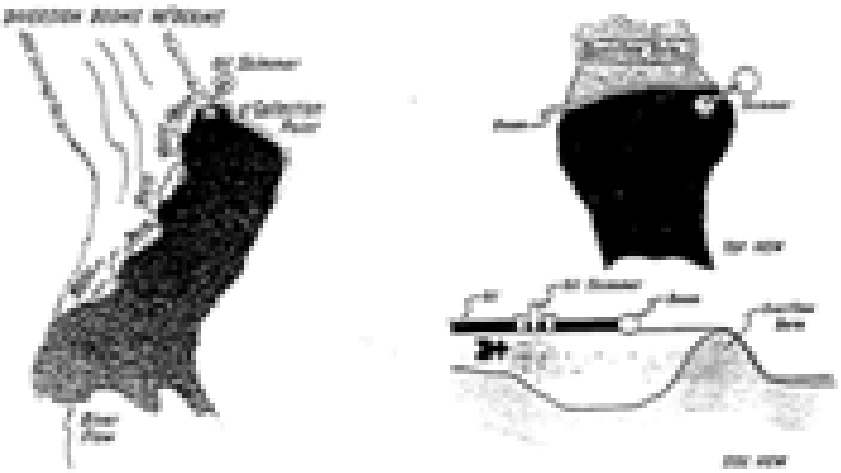
Berms are constructed to control flow by diversion or overflow. For creeks and rivers, overflow berms (weirs) or diversion berms can be constructed from materials in the floodplains. On land, earth berms can be built to divert or impede flow. In fast moving streams, berms may have to be continually maintained.

Multiple berms should be utilized and maintained on a 24 hour basis to prevent channelization and product bypassing the berm. Sorbents should be used to collect any residual product remaining behind the containment structures after initial recovery operations have been completed.

Diversion Berms: Diversion berms may be constructed from floodplain materials on large rivers. In most situations they should be constructed in a series, connected with short pieces of boom in a pattern that forces product to flow into a containment pit, side channel, or similar features for temporary storage. The spacing between each berm should allow water to flow under the connecting booms while forcing product to the side. The size and angle of the berms will be dictated by stream velocity, channel size, and product volume. As these factors increase, the required size of the berms will increase, and the angle between the upstream side of the berms and the stream bank will decrease.

Overflow Berms (Weirs): The purpose of overflow berms or weirs is to reduce water velocity by widening and deepening the stream. They can be constructed in small streams or in the side channels of larger rivers. Overflow berms must be constructed across the entire channel. Materials should be excavated from the upstream side of the berm, creating a pool where stream flow will be retarded permitting boom deployment and product removal upstream from the berm. The required height and width of the berm will increase with stream depth and water velocity.

Berms Built on Land: In most cases, berms constructed on land will act as barriers to product flow. They may also be used to divert the flow of product in a different direction so as to protect a sensitive area. A windrow of material along pipeline right of way, a highway, or road can prevent a release from crossing the right of way or road and divert it into a storage area. Berms can serve as protective barriers near sensitive areas.



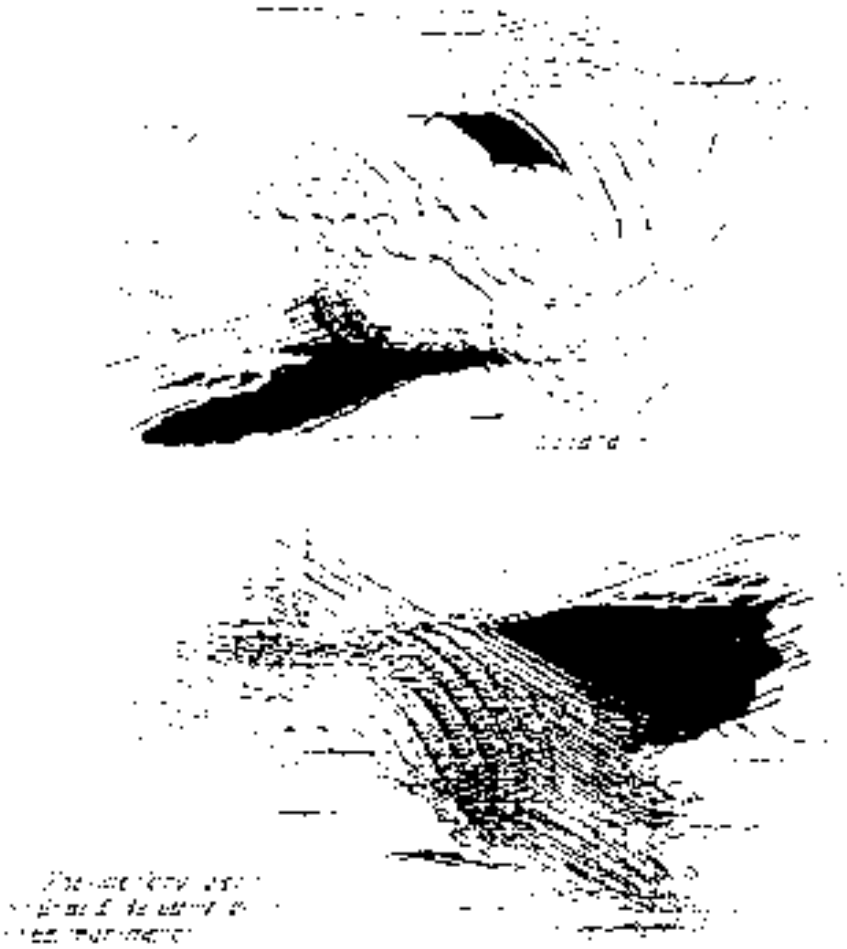
Culvert Blocking

There are several ways to block culverts. Perhaps the most effective method is to block them with earthen material - to pile dirt, sand, or a similar material over the end of the culvert. Placing sandbags or sheets of plywood over the end will also stop or retard flow.

Culverts that contain flowing water, and are to be blocked, may require the installation of an underflow device, or a pump or siphon to remove impounded water. Small volumes of water can be passed through a flume pipe covered with sandbags or dirt. Larger culverts that transport entire streams, tributaries,

creeks, or small rivers will require a more sophisticated underflow device. This can be constructed from large timbers, steel pipe, and plating.

Two pieces of pipe can be welded to a steel plate (dimensions of the pipe and plate will depend upon the size of the culvert). Large timbers with holes drilled in each end can be slipped over the pipes to act as a dam. Small blocks (chocks) can be inserted between the bottom timber and the steel plate to provide space for water to flow; the size of the chocks will vary with the volume of water that has to be removed from behind the dam.

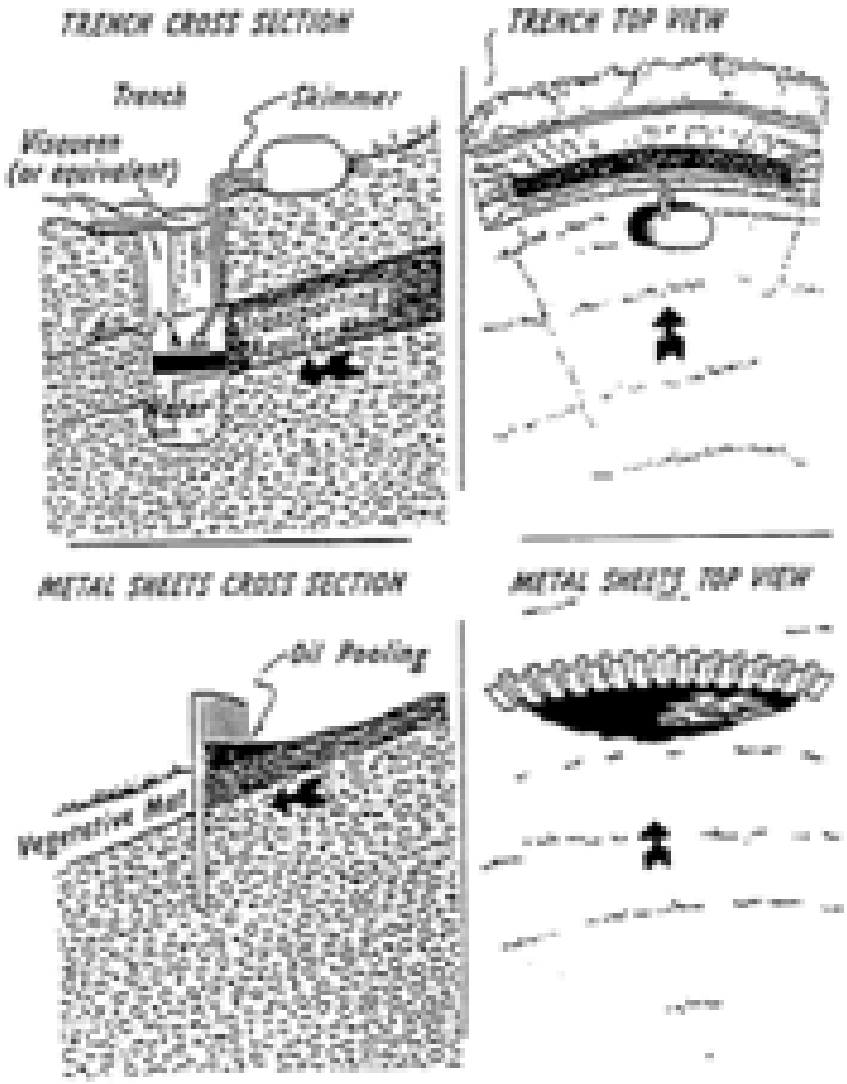


Interception Barriers

Interception barriers consist of trenches, ditches, and sheets of metal or plywood that intercept the subsurface flow of oil. Subsurface flow may be through a permeable layer that may or may not be transporting groundwater. It may also be between the vegetative mat and the ground surface. Trenches and sheet barriers may be used separately or together.

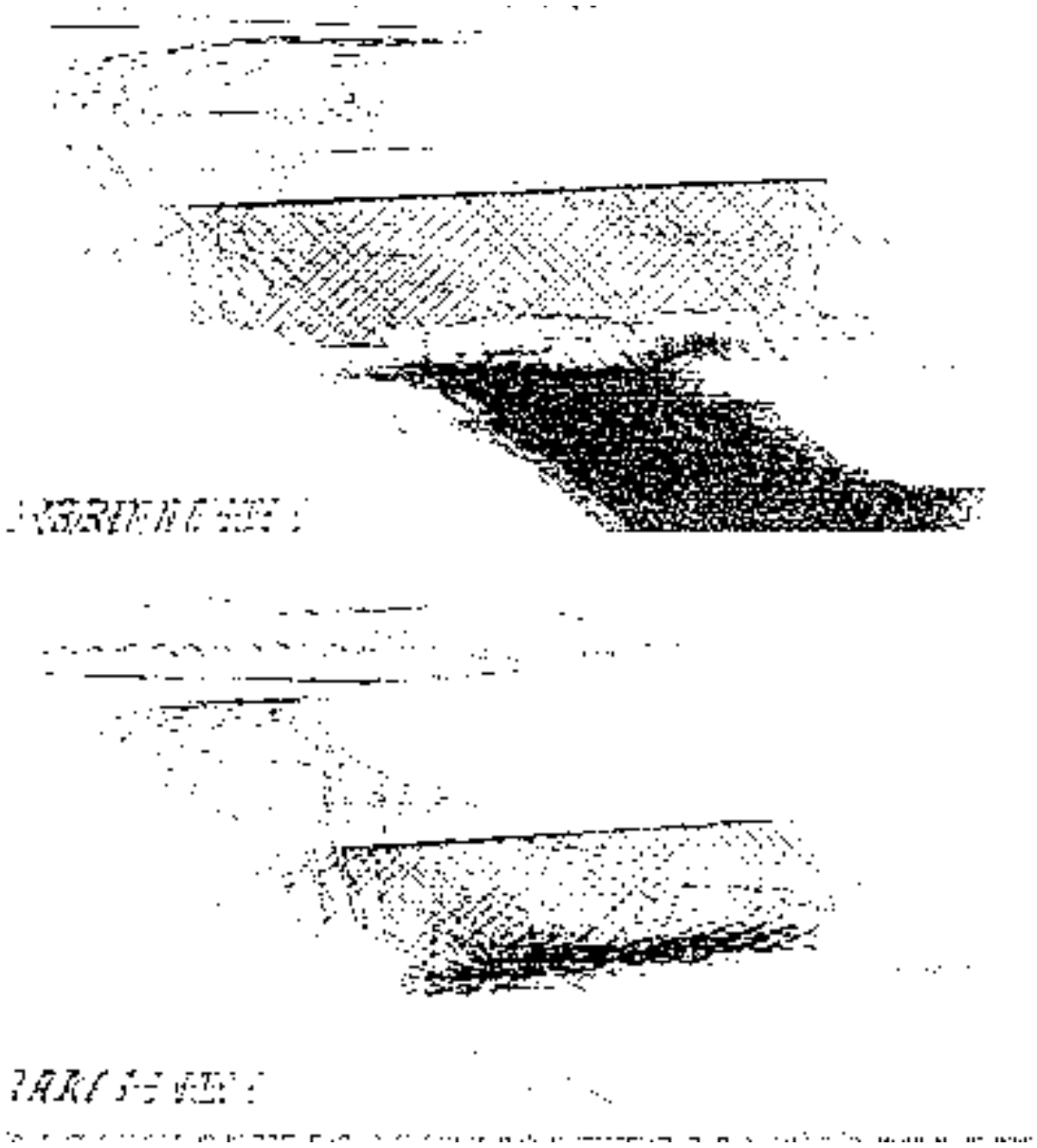
The direction of subsurface flow must be determined before a barrier is installed. First, surface reconnaissance of the area should be made. Good indications of flow are pools of product on the ground, dying or dead vegetation or an odor of product. If there are ditches that provide exposed banks, the

banks should be examined closely for seeping product. The entire area of suspected subsurface product flow should be checked. Probe rods and hydrocarbon detectors can be used. The boundaries of subsurface contamination can often be located by "poke and sniff" methods. Subsurface geology may permit product to flow in directions that do not coincide with surface gradients.



Sorbent and Trash Fences

Sorbent and trash fences may be used wherever stream depth or configuration render dams, berms, or booms impractical. Fences can be constructed quickly with stakes and wire mesh. Sorbent booms, pads, sheets, chips, straw, and small bushes may be used effectively. The mesh will hold the sorbent material while allowing the passage of water. This technique will require 24 hour maintenance to remove the product saturated sorbents and to replace them with fresh material.



Note: Sorbents are an important part of the overall containment plan and should be used whenever mechanical devices are not practical. However <u>sorbents should never be used</u> when there is not a reasonable way to recover them.

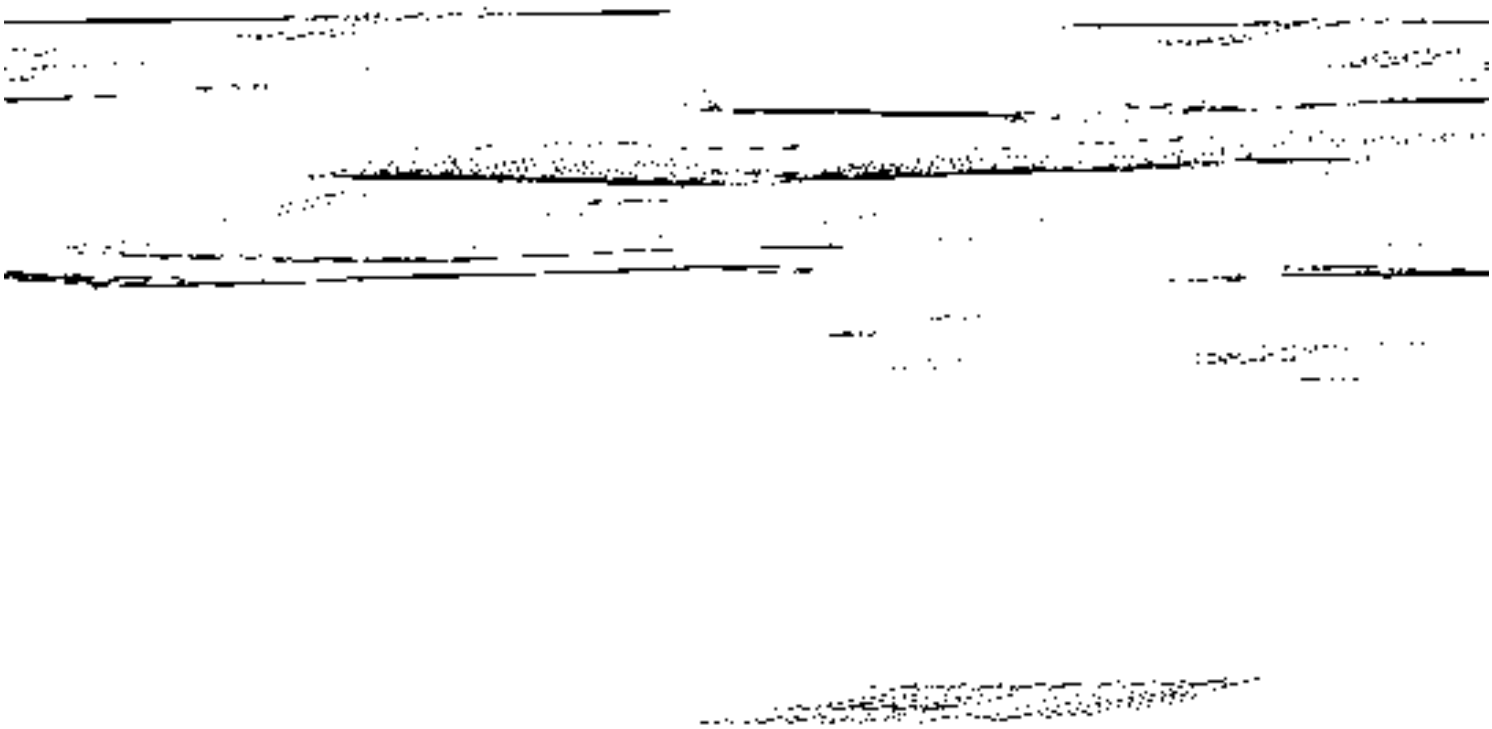
<u>Booming</u>

The diagram below depicts the typical boom used in rivers, lakes, and larger bodies of water. The size of the boom (skirt width, ballast, etc.) varies and is dependent on the purpose for which the boom is designed (open sea, harbor, river, etc.).

Booms may be deployed for two distinct purposes:

- To block and contain the flow of product at recovery location.
- To divert the product to a collection point.

In order for any of the methods to be effective, boom must be deployed at a minimum angle of thirty degrees. During high water periods, booms will require 24 hour maintenance. Debris must be continually removed to prevent damage to the boom material and potential release of captured product.



Booms to Block the Flow of Product: Booms used in a stream to block product flow and divert product into a collection point are deployed from bank to bank or from shore to shore. This technique is not likely to be useful on larger rivers. Current velocities over one knot will make it difficult to block the flow of product, and the product will have to be removed rapidly from the upstream side of the boom.

Booms deployed across the inlet stream to a lake may prevent product from reaching the lake itself. Boom the inlet and deploy preventive booms farther into the lake if necessary. Use containment booming along the shore to minimize the impact. However, booming the outlet to a lake is generally more practical because the surface of the lake provides a large storage area, and the decrease in current velocity aids in product recovery. To prevent a release from spreading once it has reached a lake, two boats towing

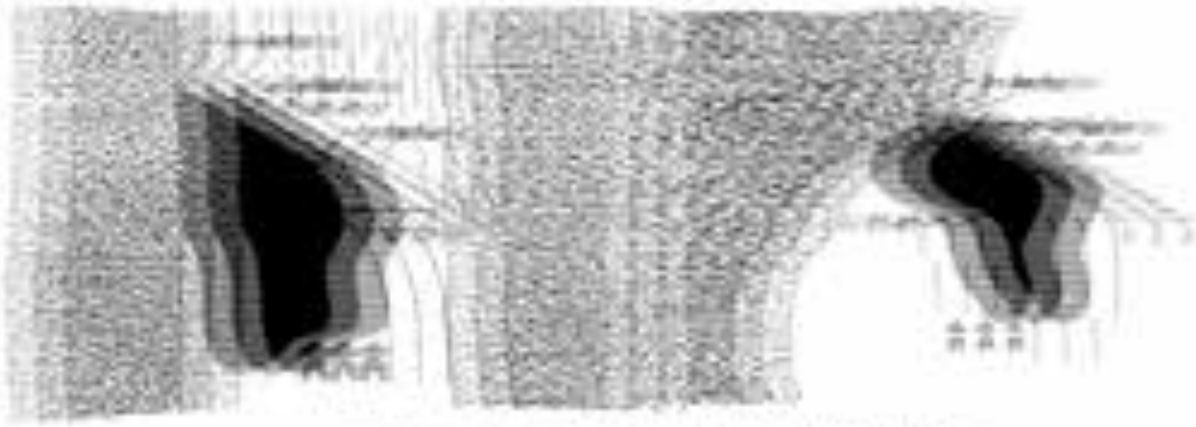
a long boom can encircle the slick and herd the product to a recovery site for removal.

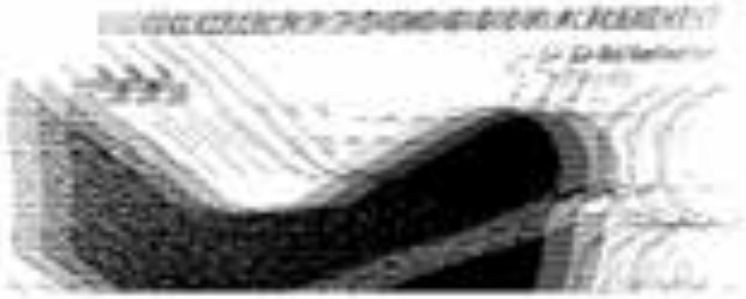
Booms deployed across a river or stream will usually contain the flow of product if current velocity is less than about one knot (1.7 fps). Surface velocity of product is affected by a factor of approximately 3% of wind speed. This should be taken into consideration regardless of the wind direction.

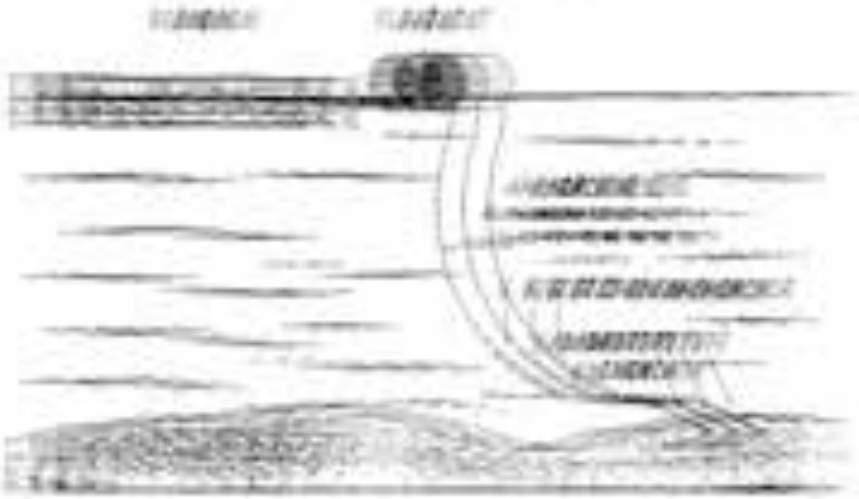
If product is flowing into a lake or stream and then onto the bank, or if the product is leaking from the ground into a water body, booms can be placed parallel to the bank. This creates a surface area from which the product may be skimmed and recovered. Booms can also be placed parallel to shore lines and banks to prevent contamination of sensitive areas.

Diversion booming should be used if current velocity does not permit blocking and containment of product.

Deflection Booming: Diversion booms are deployed to direct product toward a containment pit or other collection area or to divert product away from environmentally sensitive areas. They can be deployed as single or multiple sections. Multiple booms may be staggered across main or side channels, or used in conjunction with berms and river bars. The specific technique used depends on river characteristics and size. When using deflection booms to divert product toward a containment pit/collection area, the downstream end at the collection area should be anchored by natural features (rocks and trees). The choice of upstream anchors depends on river size, system characteristics (incised or braided) and whether or not the boom angle needs to be adjusted in response to water velocity and product volume. Vehicles or boats may be used for upstream anchoring. Diversion booms deployed to protect environmentally sensitive areas will generally be fixed between boats, natural features, or berms.

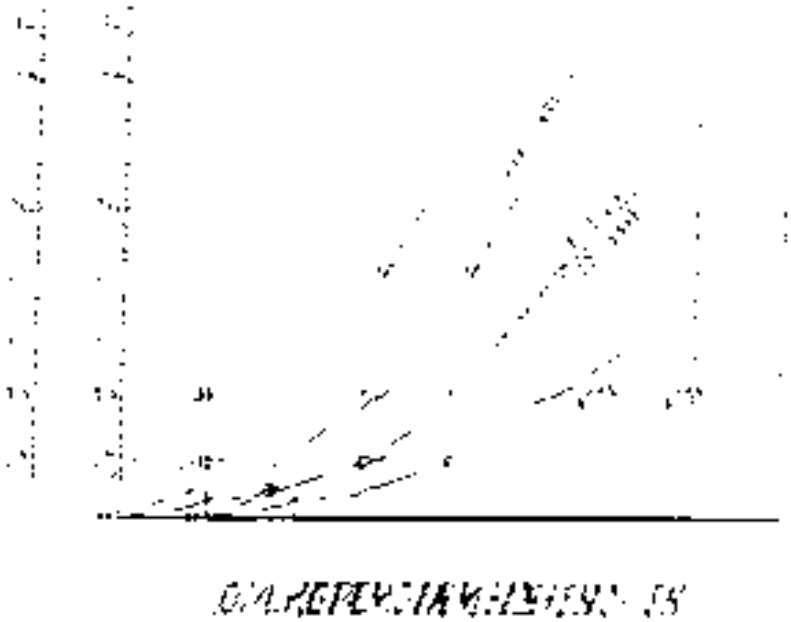






In some instances it may not be possible or desirable to boom from shore to shore. The diagram above illustrates the proper technique for anchoring boom in mid-stream. This method may be used for one or both ends of the boom.

When anchoring boom either from shore to shore, shore to anchor, or anchor to anchor, consideration should be given to the size of rope necessary to secure the boom. The chart below depicts the correct rope diameter for various lengths and sizes of boom.



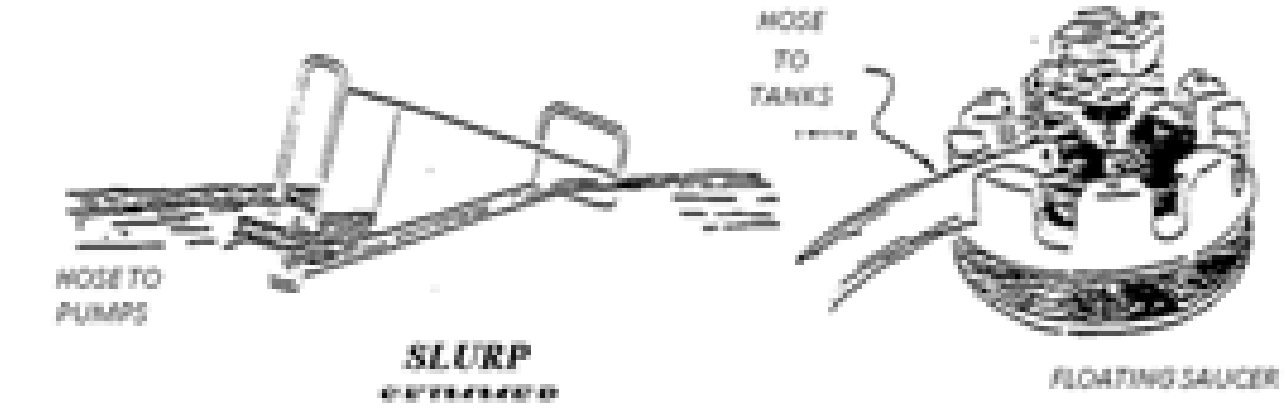
SKIMMERS

Skimming devices may be used where limited access would be a problem for larger vehicles and clean-up equipment. However, in order to be used in areas of limited access, the skimmer of choice should have the following characteristics:

- Portability – The skimmer should be small and lightweight to allow manual deployment by two or three men.
- Shallow Draft – The skimmer should be able to operate in shallow water close to the banks of streams and lake.
- Maneuverability – The skimmer should be able to move around obstructions such as fallen trees and rocks and work up against a boom.

Skimmers with the above specifications can be used along the shore lines of streams or banks in conjunction with diversion boom. The skimmers can also be used aboard a workboat inside of containment boom. In all cases, on-shore storage for collected product will have to be provided.

Two of the most common types of skimmers are shown below:



CLEAN UP AND RECOVERY TECHNIQUES

Early cleanup and disposal actions may be required to reduce or eliminate a threat to the public. If a threat to the public or environmentally sensitive area does not exist, cleanup and disposal can normally wait until after containment is accomplished and the pipeline is repaired. The following systems and materials can facilitate the removal of product and product contaminated materials:

- Heavy equipment
- Pressurized equipment
- Manual methods
- Skimmers
- Pumps
- Sorbents
- Pumping and flotation

It should be noted that the use of dispersants and other chemicals on releases is not an approved process on inland waters by any of the USEPA Regions.

<u>Heavy Equipment</u>

Bulldozers, front-end loaders, and backhoes can be used to remove product-contaminated soils from beaches, pipeline rights of way, river deltas, and floodplains. The same basic technique can be applied to cleaning up product along a highway or road.

Pressurized Equipment

There are four types of pressurized systems that are useful in removing product from rocks and man-made structures: hydro-blasting, air blasting, sandblasting, and steam cleaning. If one of these procedures is used, the Environmental Team must be consulted to determine if approval of these techniques by the appropriate state and federal agencies is necessary.

Pressurized equipment will remove a film of product from man-made structures. Care should be taken to ensure that the cleaning techniques do not cause more harm to the surface than the product. Hydro-blasting and steam cleaning will create pools of product around the surface being cleaned, and should always be used in conjunction with sorbents. Pressurized equipment should only be used with prior approval of state and federal agencies.

Safety should also be consulted to determine safe measures required when using pressure devices.

Manual Methods

The final stages of product clean-up will probably involve the hand cleaning of many surfaces, particularly areas that might be damaged by heavy equipment. Areas that are inaccessible to equipment or have only a small surface area should be cleaned by hand. Hand scrapers and wire brushes may be used to remove product impounded on rocks and man-made structures. A solvent such as acetone or a ketone that will remove this substance may be useful and will evaporate quickly, reducing the likelihood of further contamination. However, solvents are toxic and should not be used on surfaces having life forms. Approval by regulatory authorities must be obtained before using such methods.

Small pools of oil can be removed with sorbents. Product soaked debris may be cleaned up with shovels and rakes. If they must be left on site for periods of time, contaminated materials should be placed in impermeable storage containers such as polyethylene trash bags, polyethylene lined pits or approved steel drums. Small quantities of product contaminated debris can be placed in bags or piled up for removal. It may be necessary to remove contaminated vegetation and small rocks and debris by hand.

Skimmers

Skimmers are the simplest and most effective tools for removing product from the surface of water. Skimmers are normally used in conjunction with booms or diversion barriers. The three types of skimmers most commonly used are:

- Floating suction skimmer
- Floating weir skimming
- Hydraulically balanced floating weir skimmer

The three basic types of skimmers work in conjunction with booms for contained product. The principles are as follows: Floating suction units are constructed so the area of the mouth of the skimmer is large enough to permit wide coverage. In a floating suction head, a self-priming pump is needed to draw the product into the head, and the suction head is balanced to float at the product/water interface. Hoses float on top of the surface with the use of flotation collars. The advantages of suction-type skimmers are that they are simple to operate and can be used in most situations.

Floating weir skimmers are designed to allow product to flow over the top edge of a weir and into a collecting vessel where the product is removed through a flexible hose. The edge of the weir can be

adjusted so that it is set near the product/water interface to maintain good product recovery efficiency. The weir skimmer has buoyancy from floating cylinders. Hydraulically balanced floating weir skimmers automatically adjust according to preset internal liquid or air level. A flexible suction hose is connected to the bottom of the unit to remove the product as it collects inside the skimmer. Weir devices are used in many places because they are relatively inexpensive and can be constructed quickly. Support equipment, such as hoses, pumps, and storage tanks or transport tankers, is required. The weir-type skimmer operates on the principle of gravity. The top of the weir is positioned as close to the product/water interface as possible. The skimmer moves through the slick or is positioned in the current to intercept the product. The product and water flows across the weir into a sump or enclosed area. A suction pump transfers the mixture to storage tankers for transportation to permanent storage. Like most skimmers, this device works best in calm waters with a thick product slick. By carefully adjusting the weir, the maximum amount of product can be skimmed while minimizing the volume of water collected. Properly deployed boom can serve to concentrate the product and increase recovery rates.

Pumps

Vacuum trucks, diaphragm, and other types of pumps are essential in cleaning up a product release. Vacuum trucks may be positioned to directly remove product from the boom or hoses and temporary pipelines may be utilized. To increase the pumping efficiency, position transport tankers close by to off-load into them. This gives vacuum trucks quick turnaround time to continue pumping. After obtaining approval from the presiding regulatory authority, trucks should be decanted of water on site.

Diaphragm pumps may be useful in cleaning up large terrestrial releases. Because of their pumping characteristics, they are most efficient when the intake head is entirely submerged in the product. The discharge hose can lead into a truck or containment pit.

Sorbents

There are two classes of sorbents available for oil:

- Commercially available sorbents – packaged as rolls, pads, and booms.
- Naturally occurring materials – straw, hay, ground-corn cobs, peat, sawdust, and wood chips provide adequate sorption in the absence of commercial sorbents.

Additional commercial sorbents in the form of unconsolidated or bulk materials are also available but are difficult to retrieve and should be used only when necessary.

Commercial sorbents must be moved frequently to be effective. Rolls and pads are most efficient if they are turned over when the bottom side is saturated with product. Sorbent booms should be frequently rolled so that they are thoroughly exposed to the product. Booms may have to be weighted to ensure that they come in contact with the product. Sorbent booms can be used to remove light and/or small slicks from streams, ponds and lakes. The boom may be deployed between two boats or held by hand and dragged slowly through the slick or placed immediately downstream of primary boom to catch any product that bypasses the booms.

Sorbent pads and rolls are used to clean up residual slicks on bodies of water, shorelines, small pools of product on land, and small seeps. Pads can be distributed throughout boggy, marshy, and vegetated areas to remove small pools of product. They are particularly useful in areas that are sensitive to vehicular traffic as well as in remote areas.

Sorbents should be distributed during containment operations to absorb small amounts of product escaping from between the booms. This will reduce the area of contamination.

One disadvantage of the natural organic sorbents is their tendency to absorb water as well as product. Once applied, they should be recovered quickly. The natural organics retain from three to six times their weight in product, which is slightly less than that of mineral products.

Baled fibrous materials such as straw and peat moss can be distributed by a commercial mulching machine, or by hand. After use, materials are usually collected manually. Straw and peat are relatively inexpensive and readily available. However, they tend to pose difficultly with recovery and disposal operations.

Fine particulate sorbents such as ground corn cobs and sawdust are easier to spread than the fibrous materials. If used, they should be distributed from the up-wind side of a slick with a fan or blower or by hand. A boom should be placed downwind to collect both product and sorbent for easier recovery. Organic sorbents should be collected shortly after application.

Pumping and Flotation

In addition to skimming, there are two techniques involving pumping that apply to cleanup:

- Water flooding (flotation).
- Pumping subsurface product contaminated water to the surface.

Water flooding is a means of floating released product to the surface where it can be cleaned up with sorbents, skimmers, and booms.

In areas such as bogs as well as sand and gravel areas, product that has migrated downward can be forced to the surface by water flooding. A dam or other method of interception barrier can be installed down gradient or downstream from the contaminated area. Water can be impounded or backed up over contaminated soil in the dammed area and used to float product to the surface. The product can be removed using booms, skimmers, and sorbents. In areas where the contaminated material is more consolidated, the water may have to be pumped into the ground through one or more holes drilled down to the groundwater table.

When the oil has migrated to a depth of more than six feet, drilling and pumping techniques will have to be employed. Drilling and subsequent pumping of contaminated groundwater requires some knowledge of the subsurface hydrology of the affected areas. The following should be determined before implementing this process:

- Flow rates within the contaminated aquifer.
- Depth of the subsurface flow.
- Amount of water being supplied to the aquifer.
- Extent of the contamination.

The depth of the groundwater table (GWT) can be determined by forcing a tube into the soil layers. Pumping will lower the GWT, forming a depression that will trap the product so it can be pumped out. The size of pumps and rates of pumping are dictated by the rate of groundwater flow, the amount of water replenishing the GWT, and the amount of product released. The product in the water pumped from the

hole may be emulsified. The discharge hose of the pump should be connected directly to at least two large storage containers. Hoses and/or temporary pipelines may be used to provide this connection in cases where pumping units and storage containers are some distance apart.

While one storage receptacle is being filled, the other should be discharged into an oil/water separator. If pumping is discontinued before the entire volume of product is removed, the GWT will return to its former position, allowing the product to migrate farther into the aquifer.

Water used for the purposes of flooding and pumping should be properly treated before being discharged. It may be necessary to consult with the Environmental Team before using local streams, lakes, or rivers as a source of water. In some cases, a permit may be required from the appropriate state or federal department of Fish and Game Commission. If a portable oil/water separator is available, treated water may be re-circulated.

TRANSPORT AND STORAGE OF RECOVERED PRODUCT

Work order contracts are maintained with tank truck companies system-wide. Additionally, a listing of contacts with other tank truck contractors is maintained in each response zone. Adequate transportation to handle the recovered product will be arranged.

Recovered product may be transported to the nearest Colonial facility downstream of the affected line section and either placed in tankage or injected into the pipeline. Colonial's facilities are located approximately every thirty five miles along the pipeline.

If the recovered product volume is greater than the tank capacity at a Colonial facility, the product will be injected into the pipeline. Product may be pulled away from the injection location, thereby creating "storage" adequate for worst case volumes.

DISPERSING AGENTS

Dispersing agents, also called dispersants, are chemicals that contain surfactants and/or solvent compounds that act to break petroleum oil into small droplets. In an oil release, these droplets disperse into the water column where they are subjected to natural processes, such as waves and currents that help to further break them down. This helps to clear oil from the water's surface, making it less likely that the oil slick will reach the shoreline.

Environmental factors, including water salinity, temperature, and conditions at sea influence the effectiveness of dispersants. Studies have shown that most dispersants work best at salinities close to that of normal seawater. **EPA and/or State policies do not allow the use of dispersants unless authorized by an On-Scene Coordinator or the Regional Response Team.**

TYPES OF ENVIRONMENTS IMPACTED

Freshwater Marshes/Swamps

Description:

- Marshes characterized by soft-bodied, non-persistent, herbaceous vegetation, such as grasses. Swamps also have dense stands of water tolerant shrubs and trees.
- High degree of species diversity. May harbor sensitive or endangered species.
- Breeding and nursery areas for many species.
- Sediments usually consist of organic soils with a soupy consistency.
- Foot travel tends to be difficult.

Predicted Impact:

- Minimal flushing and organic soils allow oil to remain in environment.
- Season is important – dormant vegetation least sensitive; blooming and budding plants most sensitive.
- High mortality rate – especially for reptiles, amphibians, and crustaceans.
- Trace contamination can impact water supplies.

Suggested Actions:

- High-priority areas require the use of release protection devices to minimize impact (i.e. deflection booms, skimmers).
- Allow lightly covered areas to recover naturally.
- Avoid activities that mix oil into organic soils and sediments.
- Conduct manual pickup from boats and floating platforms.
- Use the least intrusive cleanup methods. A no-action alternative may be appropriate to minimize the environmental impact.
- Quick flushing and removal of oil while still fresh can reduce long-term impacts.

Vegetated Bank

Description:

- Low banks with grasses or steeper banks with trees.
- Located in fresh or brackish water.
- Contain a variety of plant species.

Predicted Impact:

- Heavy oil concentrations penetrate areas and coat plant and ground surfaces. Impact can be severe.
- Oil can persist for months.
- Water supplies can be impacted through trace contamination.

Suggested Actions:

- Use caution when cleaning. Supervise and minimize plant cutting, if conducted.
- A no-action alternative may be appropriate to minimize environmental impact.
- Cleanup usually unnecessary for light coatings; heavier accumulations may require sediment removal to allow new growth.
- Low-pressure spraying may aid removal.

Sand Beaches

Description:

- Fine/coarse sand and gravel beaches. Typically found along coastal areas and along sandbars in inland rivers.
- Sloping profiles vary from gentle to steep.
- Species density and diversity low along coarse sand or gravel beaches.

Predicted Impact:

- Heavy accumulations of oil can cover entire beach surface.
- Oil can penetrate from 15 cm to 60 cm deep.
- Organisms living along beach killed through smothering or by oil in the water column. Reduces food sources for birds and other animals.
- Birds and animals may become oil coated.

Suggested Actions:

- Fine sand beaches are easier to clean.
- Minimize sand removal to prevent erosion. Manual cleanup more efficient. Heavy equipment may remove excess sand.
- Prevent grinding of oil deeper into beach by limiting activity in heavily contaminated areas.

Riprap Structures

Description:

- Cobble to boulder-sized rocks used for shoreline protection.
- Organisms and plant life can be plentiful and varied.

Predicted Impact:

- Deep penetration of oil between boulders. If left, oil can become asphaltic.
- Fauna and flora may be killed by oil.

Suggested Actions:

- Remove all oiled debris.
- Use sorbents to remove oil in crevices.

- May remove and replace heavily oiled riprap to prevent chronic appearance of sheen.

Bluffs

Description:

- Usually found along eroding riverbanks.
- Composed of mixed grain sizes (from silt to gravel).
- Biological activities usually low.

Predicted Impact:

- Oil forms band along top of water line. Can penetrate into sandy sediments.
- Wave or current action can flush off oil within days or weeks.

Suggested Actions:

- Cleanup usually not necessary due to short residence time.
- Manual labor can be used to scrap oil from surfaces.
- Avoid removing sediments.
- Avoid mechanical cleanup (limited access and steep slopes).

Wall, Piers, and Docks

Description:

- Common in developed areas to protect or facilitate access in residential and industrial locations.
- Constructed of concrete, stone, wood, or metal.
- Mussels, shellfish, and algae often found attached to structure.

Predicted Impact:

- Oil percolates between joints and coats surfaces.
- Biota damaged or killed under heavy accumulations.

Suggested Actions:

- High-pressure spraying may remove oil, prepare substrate for recolonization of fauna/flora, and minimize aesthetic damage and chronic leaching of oil from structure.

CLEAN UP TECHNOLOGIES

The following table presents a number of alternatives for cleaning up oil in the environment, primarily along shorelines.

ACTION	DESCRIPTION	WHEN TO USE	BIOLOGICAL CONSTRAINTS	ENVIRONMENTAL EFFECTS
No Action	No action is taken.	When shoreline extremely remote, inaccessible, or cleanup will do more damage or an effective method is not available.	Not for areas with high number of mobile animals.	Same impact as oil.
Manual Removal	Remove surface oil by manual means and placed in containers for disposal. No mechanized equipment is used.	For areas where oil can be easily removed.	None.	Minimal if surface disturbance and work force movement is limited.
Passive Collection Sorbents	Sorbent material placed on oil surface.	When oil is viscous and thick enough to be absorbed.	None. Method can be slow allowing oil to remain in critical habitats.	No major effects except if soaked sorbent materials are left in environment.
Debris Removal	Manual or mechanical removal of debris, including cutting and removal of oiled logs.	Use on any accessible area. Especially important when contaminated debris could contaminate other organisms.	None.	None.
Trenching	Dig wells or trenches to the depth of oil and pump oil out of well. Best with lighter oils.	Fine grain sand beaches, coarse sand, and gravel beaches where oil has seeped in and cannot be removed by manual cleaning.	None.	None.

Colonial Pipeline Company

RELEASE RESPONSE STRATEGIES

ACTION	DESCRIPTION	WHEN TO USE	BIOLOGICAL CONSTRAINTS	ENVIRONMENTAL EFFECTS
Sediment Removal	Mechanical or manual removal of sediments. Material disposed of off-site.	Used on sand, pebble, and cobble beaches where limited amounts of oiled material have to be removed. Do not use in areas with erosion potential. Do not remove sediments past the depth of oil penetration.	Mechanized equipment should not be used in areas adjacent to endangered or sensitive species.	Maybe detrimental if too much sediment removed without replacement.
Cold Water Flooding	Wash oil from surfaces and crevices to water's edge for collection.	Boulder, cobble, gravel, and coarse sand mixed with sediment and rock. Not applicable to mud, vegetated upland, or steep rocky shorelines. Frequently used with low or high pressure washing.	Not appropriate at creek mouths.	Habitats may be physically disturbed as sand and gravel are mixed. Organisms may be flushed away.
Cold Water/Low Pressure Washing	Remove oil that has adhered to rocks or man-made structures. Oil floated to shoreline for pickup by a skimmer.	Boulder, cobble, and rock/seawall shorelines heavily oiled. Not appropriate for sedimentary habitats. Best where adhered oil must be removed to prevent continuous release into environment.	Not appropriate for sand, gravel, mud beaches, marshes, or shorelines where destruction of biological communities must be avoided.	May flush contamination into other areas. Increases turbidity in water.
Cold Water/High Pressure Washing	Better for removing adhered oil. Water pressure up to 100 psi.	Riprap, rock, and seawalls. Can be used to float oil out of crevices.	Not appropriate for sand, gravel, mud beaches, marshes, or shorelines where destruction of biological communities must be avoided.	Removes many organisms on surface. May drive oil deeper or flush into other environments. Increases turbidity.
Warm Water/Moderate to High Pressure Washing	Mobilize thick and weathered oil adhered to rock surfaces prior to flushing it down shore for pickup.	Boulder, cobble, and rock/seawall shorelines that are heavily oiled. Not appropriate for sedimentary habitats. Good for weathered or difficult to remove oil.	Tradeoff between damage to the biological community versus damage from leaving oil in place.	Can kill or remove most organisms. May flush oil into other environments. Increases turbidity.

Colonial Pipeline Company

RELEASE RESPONSE STRATEGIES

ACTION	DESCRIPTION	WHEN TO USE	BIOLOGICAL CONSTRAINTS	ENVIRONMENTAL EFFECTS
Hot Water Pressure Washing	Dislodge trapped oil from inaccessible locations and surfaces not amenable to mechanical removal. Requires extensive equipment (water heat ~ 170°F). Vacuuming necessary to remove oil flowing from rocks and soil.	Not applicable to sandy beaches, marshes, or where difficult to place equipment.	Must be careful not to remove all attached organisms from surfaces. Decreases biodegradation potential.	Has a highly negative impact on most environments. Possibility of driving oil further into substrate.
Slurry Sand Blasting	Use sandblasting equipment to remove heavy residual oil from solid substrates.	Seawalls and riprap. Equipment can be operated from boat or land.	Not to be used in areas with high biological abundance on the shoreline.	Possible destruction or smothering of organisms.
Vacuum	Use suction head, hose, and pump and storage tank to recover free oil from the water surface.	Use for large volumes of free oil. Can be used on any shoreline if accessible.	Do not use in areas where foot traffic and equipment may harm organisms.	Minimal impact if done correctly.
Shoreline Removal, Cleansing and Replacement	Remove and clean oiled substrata before returning it to the excavated area. Cleansing includes hot water wash or physical agitation with a cleansing solution.	Sand, pebble, gravel, etc. Applicable where permanent removal of sediment is undesired. Equipment must be close to excavation area to reduce transport problems. Cleaning solutions must be properly disposed.	Typically unacceptable in spawning areas. Almost all life will be removed from area. Replaced material must be free of oil and toxic substances.	May be detrimental if excessive substrate is not replaced. Very large equipment causes environmental disruption. Could be negative impact if cleaning solution not properly disposed.
Cutting Vegetation	Manual cutting of oiled vegetation using weed eaters and removal of cut material with rakes. Cut vegetation is immediately bagged for disposal.	When risk of oiled vegetation contaminating wildlife is greater than the value of the vegetation that is to be cut, and there isn't a less destructive method.	Prevent forcing of oil into sediments and contaminating the root structures.	Can be a total loss of habitat for some animals. Erosion may occur if vegetation does not grow back.

DISPOSAL

Proposed disposal methods and sites must be submitted for review and approval by the appropriate regulatory agencies. Contract disposal services should be investigated to determine if the firms are financially responsible, licensed, protected by insurance, and reputable. Local air or water pollution control officers may be able to recommend contractors that meet state requirements.

Disposal methods include oil and water separation, burning, burial, and natural degradation. The specific disposal method selected depends on the nature of the material and the availability of existing disposal sites.

All disposal activities should be coordinated through the Environmental Team.

Contaminated Product

The Environmental Team should supervise disposal. Recovered product may be transported to existing pump stations and placed in the sump tank or utility tank and stored there until the water has dropped out or drained off. The remaining product can either injected back into the pipeline or sold to a third party. Quality control procedures must be followed before product is injected into the line.

Oil/Water Separation

In addition to oil/water separators at Colonial facilities, portable separators are available or can be constructed to suit the needs at the site. Recovered material can be stored in an available tank and treated with chemicals to hasten the water drop out. The water can be removed or drained off, leaving only product.

Contaminated Materials

Product contaminated materials such as sorbent pads, leaves, twigs, and driftwood materials can be collected, put into bags, and accumulated for transportation to appropriate disposal sites.

Transportation

Product contaminated materials and debris collected must be transported in approved vehicles. Licensed haulers of hazardous materials must obtain state or federal permits for their equipment. Truck beds must be sealed to prevent leakage of material and beds must be covered. A special waste manifest must be obtained from state authorities. The manifest provides a method of verification that both the cleanup contractor and the waste hauler have taken the waste to an approved disposal facility. It is the responsibility of the generator (Colonial) to ensure that applicable requirements for packaging, transportation, and disposal are met.

Disposal Sites

In most cases the state or local authorities will designate an approved public hazardous material disposal site. There are occasions where either a public disposal site is not located within a reasonable distance of the collection points, or due to the topography or the necessity to expedite removal of material from the area, a collection may be constructed and used as a disposal site. In this instance, approval must be obtained from the proper state and local authorities.

Burning

All recovered product should be removed from the disposal pit prior to requesting a permit from air pollution authorities to burn the contaminated materials and debris. A burning permit will contain restrictions as to the volume of material that can be burned at one time, weather conditions, and times of day, in addition to the density of smoke produced by the burning process. Air quality authorities must be notified each time material is to be burned.

Burial

If burning is not allowed, burial is an alternative disposal method. Land burial can be a safe and proper method of disposal if a suitable site can be found and correct procedures are followed.

Topography, geology, and hydrology are important in selecting disposal sites. Flat upland areas, gullies, ravines, and gentle sloping hills are suitable. Unfavorable sites include depressions where water accumulates, lower reaches of streams, floodplains or other sites near surface water areas. Leaching could occur at any of these latter sites if not properly controlled. Any area with saturated soil and pooled water on the surface is undesirable.

An adequate quantity of good cover material should be available close to the site. Sandy-silty material that is workable but relatively impervious (if properly compacted) makes the best cover material.

COMMUNICATIONS

Effective communications are imperative during an emergency situation. An effective communications network needs to be established as quickly as possible utilizing any and all types of available equipment and personnel that the situation requires.

Strategies

Overall: There are three major communication needs during an emergency response:

1. The Incident Command Center must be equipped with a variety of options to use to communicate with the outside world. These options include phone lines via a hotel switchboard (or other Incident Command Center provider), various radio systems and satellite phones.

2. The various emergency response sites (pickup sites, Staging, etc) must be able to communicate with the Incident Command Center. Specific methods are listed in the following sections.

3. An emergency response site (recovery site, Staging) will require communications between workers at that site so that information can be exchanged both within the site and relayed back to the Incident Command Center. Cell phones or hand held radios are the preferred method to communicate within the site. Satellite phones are also an option.

Incident Command Center

- Insure phone communications are available via landline and/or cell phone.
- Insure inbound/outbound Fax is available.
- Install internet access is available for computers.
- Utilize a satellite phone if other means of communications are not functional.
- Test different modes of communication to determine which ones are most reliable.
- Establish a schedule for periodic progress reports from section leaders and recovery sites.
- Meetings of section leaders should be held twice daily prior to shift changes to review the status of the clean-up and the upcoming 12 hour plan.

- Prepare and maintain personnel lists with pertinent information (landline phone #, shift, hotel/room #, cellular phone #, email address, texting address, satellite phone #, etc.).
- Prepare maps with directions to the Incident Command Center, Staging, each containment/recovery site, product off-loading sites, and hotels.
- Have runners available should all other means of communications fail or become disabled.

Staging/Logistics

- Insure phone communications are available via landline and/or cell phone.
- Insure inbound/outbound fax is available.
- Insure internet access is available for computers.
- Test different modes of communication to determine which ones are most reliable.
- Utilize a satellite phone if other means of communications are not functional.
- Have runners available to set up a remote communications point if no means of communication are functional at the Staging location.

Oil Containment/Recovery Sites

- Test different modes of communication to determine which ones are most reliable.
- Utilize a satellite phone if other means of communications are not functional.
- Have runners available if normal communications are inadequate at the work site. Personnel may need to be positioned at locations where there is good reception (e.g.: at a higher elevation). Runners can be used to convey information between the work site and the relay points.

Ground Recon

- Utilize portable radio and/or cellular phone if there is adequate reception.
- Utilize a satellite phone if other means of communications are not functional.

Aerial Recon

- In the event that air-to-ground radio communications are not functional and something is observed that warrants urgent notification, land the helicopter at a location where communications can be established via cellular, radio, or satellite phone.

Public Affairs/ROW Claims

- Establish an office separate from Incident Command Center.
- Insure phone communications are available via landline and/or cell phone.
- Insure inbound/outbound fax is available.
- Establish internet connectivity via hotel, cellular air card, a local wifi provider, and/or a satellite internet data connection.
- Advertise 1-800 claims notification phone number for those affected by the incident per regulatory requirements.
- P.R. and claims to each have at least one representative available around the clock.

Types of Communication Equipment
(See IT ER Suggested Supplies for detailed list)

Voice:

- Hardwired Telephones
- Cellular and Smart Phones
- Satellite Phones
- Internet phone services such as Skype

Data:

- Local wired connection such as hotel or local service provider
- Local wifi connection such as hotel, coffee shop, etc.
- Cellular air cards and/or hotspots
- Cell phone hotspots and/or tethering
- Satellite data services

Other:

- Switches and/or Routers with wifi capability
- Faxing capability via fax machines or PC
- Printers
- Scanners
- Cameras
- Cables as needed to connect equipment
- Extension cords and surge protectors
- Equipment chargers including mobile chargers

Hardwired telephones are the most reliable form of communication and should be used if available. This mode of communication must (if at all possible) be used for discussion of sensitive topics or information. The incident command center will normally be located at a facility with several hardwired phones.

Cellular Telephones

Cellular telephones are used extensively unless reception is poor. Caution must be observed as these instruments are not intrinsically safe.

Satellite Telephones

Portable satellite telephones are quite versatile and can overcome the remote area reception problems that have been encountered with portable radios and cellular phones. The latest models are lightweight. The primary disadvantage is one-half second time delays between each transmission (e.g. phone-to-satellite-phone travel time).

Portable Radios

Portable radios are useful if towers can be accessed or if line of sight can be established. Operation can be erratic. Smaller hand-held radios may be used without a tower for up to five miles depending on

terrain. Some Nextel push-to-talk cell phones may also be used for up to five miles even if cellular services are not available.

E-mail

During an emergency, Colonial's Email System or any internet connected Email system can be used to send messages to the Incident Commander and/or the Situation Room in Atlanta. Colonials' email system includes mailboxes for "Incident Commander" (email address incident@colpipe.com) and "Atlanta Support Team" (email address response@colpipe.com).

Fax

Fax machines can be used to distribute maps, correspondence, verify permits, press releases, etc.

Colonial Pipeline Company

AIR MONITORING PROTOCOLS DURING EMERGENCY RESPONSE

AIR MONITORING DURING RECON AND INITIAL RESPONSE

Air monitoring equipment must be zeroed, bump-tested, and (as-necessary) calibrated prior to performing recon and initial response activities. Initial air monitoring results must be used to establish and delineate a perimeter where air contaminant or combustible vapors are at or below safe working levels (defined in the table below). The support (cold) zone must be established outside of this perimeter. Recon personnel should approach spill sites (and suspected spill sites) from upwind directions. Colonial personnel must suspend activities and withdraw to safe positions if conditions encountered exceed safe working levels.

Note: Low-lying areas (trenches, depressions, etc.) and enclosed spaces that need to be entered have an increased risk of containing hazardous levels of airborne contaminants.

Safe Working Levels during Recon and Initial Response

CHEMICAL/HAZARD	SAFE WORKING LEVELS	RATIONALE
LEL	<10%	Safe vapor concentration level
Oxygen	19.5% - 23.5%	OSHA acceptable breathing air range
H2S	<1ppm	ACGIH TLV-TWA for H2S
Benzene	<0.5ppm	OSHA PEL Action Level for benzene
Gasoline	<300ppm	ACGIH TLV-TWA for gasoline
Diesel	<12 ppm	ACGIH TLV-TWA for diesel fuel
Kerosene/Jet Fuel	<28 ppm	ACGIH TLV-TWA for kerosene

- OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8 hour work shift or a 40 hour work week (OSHA 29 CFR: 1910.1000).
- Action Level = ½ of PEL.
- ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8 hour work day and a 40 hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).

AIR SAMPLING STRATEGIES DURING RECON AND INITIAL RESPONSE

Employees shall utilize real-time air monitoring devices to determine exposure levels and implement protective perimeters.

<u>Sampling strategy</u>

- WARNING: Personnel must not enter contamination reduction (hot) zones without proper PPE.
- Approach the release site from upwind. Identify alternate routes of escape and any potential ignition sources such as motor vehicles.
- Upon confirmation of the presence of product or product vapors through sight or smell, begin sampling for all hazards of concern listed above. Approaching the source, resample at least every hundred feet until detections reach or exceed any of the values listed above.

- If detection levels reach or exceed any of the values listed above, move at least 100 feet upwind and establish a protective perimeter. Establish perimeter boundaries in all directions using monitoring results taken in all cardinal directions or conservative decision-making.
- Once the boundary is established, conduct the following activities:
  - Evacuate any personnel within the hot zone that are without proper PPE.
  - Clearly mark boundaries with physical barrier – e.g. barrier tape, snow fence, signs, ropes, etc.
  - Keep unauthorized personnel away from the area.
  - Continue air monitoring at the perimeter at least every fifteen minutes.
  - Evacuate occupied buildings within or near the perimeter.
- If detection readings sustain (or drop) during any one hour period, monitoring frequency can be reduced to once per hour.
- Monitor weather conditions (wind direction, wind speed, humidity, etc.) to determine the areas of downwind impact.
- If detection levels are at or above any of the values above in areas near roadways or nearby communities (residential, commercial, or retail), discuss readings with local emergency responders to determine if evacuations, road closures, or other actions are appropriate.

Recommended Sampling Equipment and Frequency

Instrument	Sensor/Tube	Analyte	Detection Limits	Frequency
MSA® Altair 5 or 5X[1]	4-gas monitor	LEL	1 - 100%	Initial + continuous
Rae® Detection Tube	Benzene (w/ LP-1200 pump)	Benzene	0.5 – 10 ppm	Initial + every 15 minutes
Rae® Detection Tube	Gasoline (w/ LP-1200 pump)	Gasoline	30 – 1000 ppm	Initial + every 15 minutes
Rae® Detection Tube	Diesel & Jet Fuel (w/ LP-1200 pump)	Kerosene/Jet Fuel	0.5 – 25 ppm	Initial + every 15 minutes

[1]Equivalent LEL monitors may be used.
The equipment listed above is intended for worker protection strategies. As needed, community air monitoring shall be conducted by third party consultants or local responders using equipment with greater detection limits.

AIR MONITORING CONTRACTORS

As needed, Colonial uses third party consultants to provide primary air monitoring and employee exposure monitoring during emergency response operations. Air monitoring services may also be offered by most OSROs as part of their normal services for the protection of their personnel.

Upon initial notification, and based on initial assessment of the spill, the Safety Officer (SOFR) shall make

an immediate determination regarding mobilization of air monitoring contractors during an emergency response.

BENZENE

Protection thresholds for benzene are far lower than the other volatile organic compounds (VOCs) found in refined petroleum products. While multiple VOCs will likely be present during emergency response, benzene is often the primary hazard of concern during an emergency response when total VOC levels are not sufficient to cause an explosion/flammability hazards.

COMMUNITY EVACUATION AND REOCCUPATION GUIDELINES

Community evacuation and reoccupation guidelines are found below. All recommendations to authorities, however, must be closely coordinated with local response personnel and in accordance with site/event-specific air monitoring plans.

Initial evacuation recommendations should be based on the most recent revision of the Department of Transportation's *Emergency Response Guidebook* (ERG). Products transported by Colonial fall within ERG guide number 128 (Flammable Liquids). The table below contains evacuation guidelines from the ERG.

Initial Evacuation Guidelines from the DOT's *Emergency Response Guidebook*

Large Spill	Consider initial downwind evacuation for at least 300 meters (1000 feet)
Fire	Consider initial evacuation for 800 meters (1/2 mile) in all directions

Air monitoring consultants will produce site/event-specific air monitoring plans during emergency response. As air monitoring data becomes available, evacuation recommendations may be revised. General evacuation criteria are listed in the table below.

Product/Chemical-Specific General Evacuation Criteria

PRODUCT/CHEMICAL	COMMUNITY EVACUATION THRESHOLD
Gasoline (all grades)	≥ 0.2 ppm total VOCs
Benzene	≥ 0.05 ppm
Toluene	≥ 2.5 ppm
Ethyl benzene	≥ 2.3 ppm
Xylene	≥ 0.04 ppm
Diesel fuel (all grades)	≥ 0.2 ppm total VOCs
Kerosene (all grades)	≥ 0.1 ppm total kerosene
Naphthalene	≥ 10 ppm

Note: Evacuation thresholds are lower than the detection limits of sampling equipment utilized by Colonial employees. As needed, community air monitoring shall be conducted by third party consultants or local responders using equipment with greater detection limits.

Community reoccupation criteria are listed in table below. Reoccupation action levels are the inverse of evacuation levels. Reoccupation of residences will be determined based on air monitoring results, and a collaboration of Colonial emergency response personnel, local and/or government emergency response personnel, and air monitoring consultant advisors.

Community Reoccupation Criteria

PRODUCT/CHEMICAL	COMMUNITY EVACUATION THRESHOLD
Gasoline (all grades)	< 0.2 ppm total VOCs
Benzene	< 0.05 ppm
Toluene	< 2.5 ppm
Ethyl benzene	< 2.3 ppm
Xylene	< 0.04 ppm
Diesel fuel (all grades)	< 0.2 ppm total VOCs
Kerosene (all grades)	< 0.1 ppm total kerosene
Naphthalene	< 10 ppm

PRODUCT-SPECIFIC AIR MONITORING AND AIR SAMPLING STRATEGIES

Sampling Strategy:

- Obtain real time air monitoring data as soon as safely possible in the area nearest the spill and downwind of the spill for all hazards of concern listed above. Collect real time downwind data for LEL, benzene, and total VOCs first. *Note date/time, wind direction, GPS coordinates and location description, note odor presence or absence, equipment description, and use of respiratory protection. Communicate this data to first responders.
- Obtain liquid sample of product for percentage composition of hazards of concern. This data will help in establishing the chemicals of concern for this particular spilled product.
- Begin collecting real time data outside of the spill area in areas such as nearby facilities and businesses, nearby residences, schools, community buildings, hospitals, etc. in a 360 degree pattern. *Note date/time, wind direction, GPS coordinates and location description, presence or absence of odor, and equipment description.
- Establish a perimeter around the work area using real time equipment and analytical sampling stations. The perimeter should be established so as to capture all cardinal directions should shifts in wind direction take place during the response.
- Monitor weather conditions (wind direction, wind speed, humidity, etc.) to determine the areas of downwind impact.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The following are the defined levels of PPE required. These levels may be modified depending on specific site conditions or job tasks as determined by the Safety Officer.

- **Level A** – Fully encapsulated chemical resistant suit, air-supplied respirator, inner/ outer gloves, over boots, two-way communications**.**
- **Level B –** SCBA (or Airline with escape pack), Nomex, Sarnex or coated Tyvex, chemical resistant boots, chemical resistant gloves and hard hat.
- **Level C –** Full/half face air purifying respirator, Nomex or coated Tyvex, chemical resistant (or safety toe) boots, chemical resistant gloves, eye protection and hard hat.

- **Level D –** Hard hat, eye Protection, foot protection, hearing protection. Level D PPE also includes helmet-mounted eye protection goggles.

GASOLINE (ALL GRADES)

Hazards of concern: (listed in SDS for product):
Xylene, toluene, n-hexane, benzene, 1,2,4-trimethylbenzene, ethyl benzene, and naphthalene.

Other hazards not listed specifically in SDS:
LEL (lower explosive limit), VOCs (volatile organic compounds).

Recommended Real-Time Data Collection

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument[1]	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument[2]	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm
Colorimetric Tube	Naphthalene Gastec® 60	Naphthalene	0.1 ppm
Colorimetric Tube	Toluene Gastec® 122L	Toluene	0.5 ppm
Colorimetric Tube	Xylene Gastec®123L	Xylene	1 ppm

[1]The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has correction factors for kerosene, xylene, toluene, n-hexane, benzene, ethylbenzene, and naphthalene.
[2] Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor has correction factors for jet fuel, xylene, toluene, n-hexane, benzene, ethylbenzene, and naphthalene.

Recommended Analytical Sample Collection

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3520)	NIOSH 1550	Benzene, toluene, ethylbenzene, xylene (BTEX), kerosene	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours

Occupational Exposure Thresholds

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-STEL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Ethyl Benzene (ppm)	100	-	-	20	125	URT irr; kidney; cochlear impair
Toluene (ppm)	200	-	300, 500‡	20	-	Visual impair; reproductive
Xylene (ppm)	100	-	-	100	150	URT irr; eye irr; CNS impair
Trimethylbenzene				25		URT irr; eye irr; CNS impair
Gasoline (ppm)	300 (VOC)	500		300	500	URT irr; eye irr; CNS impair

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8 hour work shift or a 40 hour work week (OSHA 29 CFR: 1910.1000).
OSHA PEL-STEL = The time weighted average exposure that should not be exceeded for any 15 minute period (OSHA 29 CFR: 1910.1000).
OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15 minute time-weighted average (TWA) exposure, which shall not be exceeded at any time during the working day (OSHA 29 CFR: 1910.1000).
ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8 hour work day and a 40 hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).
ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).

Colonial Pipeline Company

AIR MONITORING PROTOCOLS DURING EMERGENCY RESPONSE

ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day. (ACGIH, 2011c).

Actions and PPE for Work Areas

Job Task	Level	Environment[1]	Respirator
Gasoline			
General Air Monitoring	D	< 300 ppm	None
Air Monitoring w/ vapor exposure	B	≥ 300 ppm	SCBA or airline respirator w/ 10 min escape
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	> 5 – < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape
Toluene			
General Air Monitoring	D	< 20 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 20 – < 200 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 20 – < 500 ppm (IDLH Applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 500 ppm (IDLH Applied)	SCBA or airline respirator w/ 10 min escape
Ethyl benzene			
General Air Monitoring	D	< 20 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 20 – < 200 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 20 – < 800 ppm (IDLH applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 800 ppm (IDLH applied)	SCBA or airline respirator w/ 10 min escape
Xylene			
General Air Monitoring	D	< 100 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 100 – < 900 ppm (IDLH applied)	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 100 – < 900 ppm (IDLH applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 900 ppm (IDLH applied)	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and Contamination Reduction (warm) *zone* work area perimeters should be based on the respiratory protection requirement, APR, and SCBA respectively. During a spill with highly volatile compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If average benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene (1910.1028).

DIESEL FUEL (ALL GRADES)

Hazards of concern: (listed in SDS for product):
Fuel oil No. 2.

Other hazards not listed specifically in SDS:
LEL (lower explosive limit), benzene, and VOCs (volatile organic compounds).

Recommended Real-Time Data Collection

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument[1]	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument[2]	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm

[1] The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has a correction factor for benzene and diesel fuel #2.
[2] Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor does not have a specific correction factor for diesel fuel.

Recommended Analytical Sample Collection

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3520)	NIOSH 1550	Benzene, toluene, ethylbenzene, xylene (BTEX), kerosene	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours

Occupational Exposure Thresholds

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-STEL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Diesel				100 mg/m^3		12 ppm VOCs

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8 hour work shift or a 40 hour work week (OSHA 29 CFR: 1910.1000).
OSHA PEL-STEL = The time weighted average exposure that should not be exceeded for any 15 minute period (OSHA 29 CFR: 1910.1000).
OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15 minute time weighted average (TWA) exposure, which shall not be exceeded at any time during the working day. (OSHA 29 CFR: 1910.1000).
ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8 hour workday and a 40 hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).
ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).
ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day (ACGIH, 2011c).

Actions and PPE for Work Areas

Job Task	Level	Environment[1]	Action
Diesel			
General Air Monitoring	D	< 12 ppm total hydrocarbons *if benzene non-detect	None
Air Monitoring w/vapor exposure	C	≥ 12 – 120 ppm total hydrocarbons *if benzene < 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 12 ppm total hydrocarbons *if benzene < 25 ppm	Full-face APR w/ P100 OVM
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	> 5 – < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and Contamination Reduction (=warm) zone work area perimeters should be based on the respiratory protection requirement, APR, and SCBA respectively. For diesel specifically an action level of 0.2 ppm VOCs should be established for further investigation in areas of the community not previously evacuated (This is a corrected value based off of the 8 hour TWA-TLV). During a spill with highly volatile compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene.

KEROSENE (ALL GRADES)

Hazards of concern: (listed in SDS for product):
Kerosene, naphthalene.

Other hazards not listed specifically in SDS:
LEL (lower explosive limit), benzene, and VOCs (volatile organic compounds).

Colonial Pipeline Company

AIR MONITORING PROTOCOLS DURING EMERGENCY RESPONSE

Recommended Real-Time Data Collection

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument[1]	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument[2]	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm
Colorimetric Tube	Naphthalene Gastec® 60	Naphthalene	0.1 ppm

[1] The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has correction factors for kerosene, benzene, and naphthalene.

[2] Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor has correction factors for jet fuel, benzene, and naphthalene.

Recommended Analytical Sample Collection

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3500)	NIOSH 1550	Benzene, kerosene	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1550	Kerosene/naphthalene	8 to 12 hours

Occupational Exposure Thresholds

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-SETL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Kerosene				28.7		
Naphthalene	10			10	15	2B possible carcinogen

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8 hour work shift or a 40 hour work week (OSHA 29 CFR: 1910.1000).

OSHA PEL-STEL = The time weighted average exposure that should not be exceeded for any 15 minute period (OSHA 29 CFR: 1910.1000).
OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15 minute time-weighted average (TWA) exposure, which shall not be exceeded at any time during the working day. (OSHA 29 CFR: 1910.1000).
ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8 hour work day and a 40 hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).
ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).
ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day. (ACGIH, 2011c).

Actions and PPE for Work Areas:

Job Task	Level	Environment[1]	Action
Kerosene			
General Air Monitoring	D	<28 ppm *if benzene non-detect	None
Air Monitoring w/vapor exposure	C	≥ 28 ppm *if benzene < 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 28 ppm *if benzene < 25 ppm	Full-face APR w/ P100 OVM
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	>5 – <25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and Contamination Reduction (warm) zone work area perimeters should be based on the respiratory protection requirement, APR, and SCBA respectively. During a spill with highly volatile compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene.

TRANSMIX

Hazards of concern: (listed in SDS for product):
Petroleum distillates, fuel oil no. 2, kerosene, xylene, toluene, n-hexane, benzene, 1,2,4-trimethylbenzene, ethylbenzene, and naphthalene.

Other hazards not listed specifically in SDS:
LEL (lower explosive limit), VOCs (volatile organic compounds).

Recommended Real-Time Data Collection

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument[1]	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument[2]	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm
Colorimetric Tube	Naphthalene Gastec® 60	Naphthalene	0.1 ppm
Colorimetric Tube	Toluene Gastec® 122L	Toluene	0.5 ppm
Colorimetric Tube	Xylene Gastec®123L	Xylene	1 ppm
Colorimetric Tube	Naphtha Gastec®106	Naphtha	0.1 mg/L

[1] The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has correction factors for kerosene, naphtha, xylene, toluene, n-hexane, benzene, ethylbenzene and naphthalene.
[2] Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor has correction factors for jet fuel, xylene, toluene, n-hexane, benzene, ethylbenzene, and naphthalene.

Recommended Analytical Sample Collection

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3520)	NIOSH 1550	Benzene, toluene, ethylbenzene, xylene (BTEX), kerosene	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours

Occupational Exposure Thresholds

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-SETL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Ethyl Benzene (ppm)	100	-	-	20	125	URT irr; kidney; cochlear impair
Toluene (ppm)	200	-	300, 500‡	20	-	Visual impair; reproductive
Xylene (ppm)	100	-	-	100	150	URT irr; eye irr; CNS impair
Trimethylbenzene				25		URT irr; eye irr; CNS impair
Naphtha	25					Analogy to kerosene

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8 hour work shift or a 40 hour work week (OSHA 29 CFR: 1910.1000).

OSHA PEL-STEL = The time weighted average exposure that should not be exceeded for any 15 minute period (OSHA 29 CFR: 1910.1000).

OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15 minute time-weighted average (TWA) exposure, which shall not be exceeded at any time during the working day (OSHA 29 CFR: 1910.1000).

ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8 hour workday and a 40 hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).

ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).

ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day. (ACGIH, 2011c).

Colonial Pipeline Company

AIR MONITORING PROTOCOLS DURING EMERGENCY RESPONSE

Actions and PPE for Work Areas

Job Task	Level	Environment[1]	Action
Naphtha			
General Air Monitoring	D	< 20 ppm VOCs *if benzene non-detect	None
Air Monitoring w/vapor exposure	C	≥ 20 – 200 ppm VOC *if benzene < 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 20 ppm VOC *if benzene < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 1,100 ppm *10% of the LEL	SCBA or airline respirator w/ 10 min escape
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	> 5 – < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape
Toluene			
General Air Monitoring	D	< 20 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 20 – < 200 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 20 – < 500 ppm (IDLH Applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥500 ppm (IDLH Applied)	SCBA or airline respirator w/ 10 min escape
Ethyl benzene			
General Air Monitoring	D	< 20 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 20 – < 200 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 20 – < 800 ppm (IDLH applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 800 ppm (IDLH applied)	SCBA or airline respirator w/ 10 min escape
Xylene			
General Air Monitoring	D	< 100 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 100 – < 900 ppm (IDLH applied)	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 100 – <900 ppm (IDLH applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 900 ppm (IDLH applied)	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and Contamination Reduction (warm) zone work area perimeters should be based on the respiratory protection requirement, APR, and SCBA respectively. During a spill with highly volatile compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene.

BIODIESEL (ALL GRADES)

Hazards of concern: (listed in SDS for product):
Petroleum distillates and benzene.

Other hazards not listed specifically in SDS:
LEL (lower explosive limit), naphtha, and VOCs (volatile organic compounds).

Recommended Real-Time Data Collection

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument[1]	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument[2]	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm
Colorimetric Tube	Naphtha Gastec®106	Naphtha	0.1 mg/L

[1] The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has correction factors for naphtha and benzene.
[2] Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor has correction factors for jet fuel, gasoline, and benzene.

Recommended Analytical Sample Collection

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3520)	NIOSH 1550	Benzene, toluene, ethylbenzene, xylene (BTEX)	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours

Occupational Exposure Thresholds

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-SETL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Naphtha	25					* analogy to kerosene

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8 hour work shift or a 40 hour work week (OSHA 29 CFR: 1910.1000).
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Actions and PPE for Work Areas:

Job Task	Level	Environment[1]	Action
Naphtha			
General Air Monitoring	D	< 20 ppm VOCs *if benzene non-detect	None
Air Monitoring w/vapor exposure	C	≥ 20 – 200 ppm VOC *if benzene < 5 ppm	Half-face APR w/ P100 OV/M
Air Monitoring w/vapor exposure	C	≥ 20 – 1000 ppm VOC *if benzene < 25 ppm	Full-face APR w/ P100 OV/M
Air Monitoring w/ vapor exposure	B	≥ 1,100 ppm *10% of the LEL	SCBA or airline respirator w/ 10 min escape
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OV/M
Air Monitoring w/ vapor exposure	C	> 5 – < 25 ppm	Full-face APR w/ P100 OV/M
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and Contamination Reduction (warm) zone work area perimeters should be based on the respiratory protection requirement, APR, and SCBA respectively. During a spill with highly volatile compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene.

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

Division	State	Line_Number	Location_Code	Valve Name	Remarks	Remote Control Valve	County	Milepost	Degrees	Lat	Long	In_Place_Date
SED	Alabama	LINE 4[illegible]	0402		Main line Block Valve	No	Jefferson	[redacted]				Yes
SED	Alabama	LINE 2	0405	Vance Station	Main line Block Valve	No	Bibb	[redacted]				No
SED	Alabama	LINE 2	0405	Moundville Station	Main line Block Valve	No	Hale	[redacted]				No
SED	Alabama	LINE 4[illegible]	0402		Main line Block Valve	No	Jefferson	[redacted]				Yes
SED	Alabama	LINE 4[illegible]	0402		Main line Block Valve	No	Jefferson	[redacted]				Yes
SED	Alabama	LINE 1	0402	East of Coosa Riv	Main line Block Valve	No	Shelby	[redacted]				No
SED	Alabama	LINE 4[illegible]	0449	Bulgge Del. Facility	Block Valve	No	Greene	[redacted]				No
SED	Alabama	LINE 1	0402	Oxford Station	Main line Block Valve	Yes	Calhoun	[redacted]				Yes
SED	Alabama	LINE 1	0402	Pelham Station	Main line Block Valve	No	Shelby	[redacted]				No
SED	Alabama	LINE 1	0402	St. Joes Station	Main line Block Valve	Yes	Talladega	[redacted]				No
SED	Alabama	LINE 2	0402	Moundville Sta. Inv	Main line Block Valve	No	Hale	[redacted]				No
SED	Alabama	LINE 4[illegible]	0402		Main line Block Valve	No	Jefferson	[redacted]				Yes
SED	Alabama	LINE 4[illegible]	0403		Main line Block Valve	No	Calhoun	[redacted]				Yes
SED	Alabama	LINE 2	0402	Pelham Station	Main line Block Valve	No	Shelby	[redacted]				No
SED	Alabama	LINE 2	0405	Moundville Station	Main line Block Valve	Yes	Hale	[redacted]				No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Alabama	LINE 2	0405	Vance Station	Main line Block Valve	Yes	Bibb	[redacted]	No
SEO	Alabama	LINE 46231	0462		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 46203	0462		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 1	0405	Pelham Station	Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 44902	0449	Bulgger Trap Site	Block Valve	No	Greene	[redacted]	No
SEO	Alabama	LINE 46227	0462		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 44902	0449	Bulgger Del. Facility	Block Valve	No	Greene	[redacted]	No
SEO	Alabama	LINE 1	0405	West Tallapoosa Ave	Main line Block Valve	No	Cleburne	[redacted]	No
SEO	Alabama	LINE 1	0405	Pelham Station	Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 1	0405	East of Coosa Ave	Main line Block Valve	No	Talladega	[redacted]	No
SEO	Alabama	LINE 46203	0462		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 46203	0462		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 1	0405	Vance Station	Main line Block Valve	Yes	Bibb	[redacted]	No
SEO	Alabama	LINE 1	0405	West of Cahaba River	Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 1	0405	Moundville Station	Main line Block Valve	No	Hale	[redacted]	No
SEO	Alabama	LINE 2	0405	Vance Station Ave	Main line Block Valve	No	Bibb	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Alabama	LINE 2	0405	W of Cahaba River	Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 12	0405	Helena Int.	Main line Block Valve	Yes	Shelby	[redacted]	No
SEO	Alabama	LINE 41100	0402		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 41214	0402		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 1	0405	Moundville Sta. Int.	Main line Block Valve	Yes	Hale	[redacted]	No
SEO	Alabama	LINE 1	0403	E of Choccolocco Cr.	Main line Block Valve	No	Calhoun	[redacted]	Yes
SEO	Alabama	LINE 41207	0402		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 41209	0402		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 1	0405	Pelham Station	Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 1	0403	Heflin Station	Main line Block Valve	No	Cleburne	[redacted]	No
SEO	Alabama	LINE 1	0405	W Black Warrior Riv	Main line Block Valve	No	Greene	[redacted]	No
SEO	Alabama	LINE 1	0403	Heflin Station	Main line Block Valve	No	Cleburne	[redacted]	No
SEO	Alabama	LINE 1	0403	Heflin Station	Main line Block Valve	Yes	Cleburne	[redacted]	No
SEO	Alabama	LINE 41208	0402		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 1	0405	Vance Station	Main line Block Valve	No	Bibb	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

								[redacted]	
SEO	Alabama	LINE 1	0405	Tomkigbee River	Main line Block Valve	No	Greene	[redacted]	No
SEO	Alabama	LINE 12	0401	Pelham Jct.	Main line Block Valve	Yes	Shelby	[redacted]	No
SEO	Alabama	LINE 41209	0401		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 1	0401	Pelham Station	Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 2	0401	W of Tom-Bigbee Riv	Main line Block Valve	No	Sumter	[redacted]	No
SEO	Alabama	LINE 1	0402	St. Joe Station	Main line Block Valve	No	Talladega	[redacted]	No
SEO	Alabama	LINE 1	0402	W of Chocolocco Cr	Main line Block Valve	No	Talladega	[redacted]	No
SEO	Alabama	LINE 41218	0401		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 2	0401	Pelham Station	Main line Block Valve	Yes	Shelby	[redacted]	No
SEO	Alabama	LINE 1	0403	Vance Station	Main line Block Valve	No	Bibb	[redacted]	No
SEO	Alabama	LINE 1	0402	Oxford Station	Main line Block Valve	No	Calhoun	[redacted]	Yes
SEO	Alabama	LINE 41212	0401		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 41210	0401		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 41202	0401		Main line Block Valve	No	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 1	0402	St. Joe Station	Main line Block Valve	No	Talladega	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Alabama	LINE 4000	0400		Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 1	0402	Moundville Station	Main line Block Valve	Yes	Hale	[redacted]	No
SEO	Alabama	LINE 1	0403	East of Cahaba River	Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 4000	0449	Bulgas Trap Site	Block Valve	No	Greene	[redacted]	No
SEO	Alabama	LINE 4000	0400		Main line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 1	0405	Pelham Station	Main line Block Valve	Yes	Shelby	[redacted]	No
SEO	Alabama	LINE 1	0402		Main line Block Valve	No	Talladega	[redacted]	No
SEO	Alabama	LINE 4000	0403		Main line Block Valve	No	Calhoun	[redacted]	Yes
SEO	Alabama	LINE 1	0402	Oxford Station	Main line Block Valve	No	Calhoun	[redacted]	Yes
SEO	Alabama	LINE 2	0403	Tallapoosa River	Main line Block Valve	No	Cleburne	[redacted]	No
SEO	Alabama	LINE 1	0402	Oxford Station	Main line Block Valve	No	Calhoun	[redacted]	Yes
SEO	Alabama	LINE 2	0402	St. Louis Station	Main line Block Valve	No	Talladega	[redacted]	No
SEO	Alabama	LINE 12	0401	Birmingham DC	Main line Block Valve	No	Jefferson	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Alabama	LINE 02234	04422		[redacted]	Yes	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 2	04422	Oxford Station	Main-line Block Valve	Yes	Calhoun	[redacted]	Yes
SEO	Alabama	LINE 2	04422	St. Ivan Station	Main-line Block Valve	Yes	Talladega	[redacted]	No
SEO	Alabama	LINE 2	04422	Heflin Station	Main-line Block Valve	No	Cleburne	[redacted]	No
SEO	Alabama	LINE 2	04422	Heflin Station	Main-line Block Valve	No	Cleburne	[redacted]	No
SEO	Alabama	LINE 2	04422	W of Cocoa River	Main-line Block Valve	No	Shelby	[redacted]	No
SEO	Alabama	LINE 2	04422	St. Ivan Station	Main-line Block Valve	No	Talladega	[redacted]	No
SEO	Alabama	LINE 2	04422	Oxford Station	Main-line Block Valve	No	Calhoun	[redacted]	Yes
SEO	Alabama	LINE 2	04422	Heflin Station	Main-line Block Valve	Yes	Cleburne	[redacted]	No
SEO	Alabama	LINE 12	04422	Birmingham DP	Main-line Block Valve	No	Jefferson	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Alabama	LINE 4(215)	04K2		[redacted]	Yes	Jefferson	[redacted]	Yes
SEO	Alabama	LINE 2	04K2	West Cheaha Creek	Main line Block Valve	No	Talladega		No
SEO	Alabama	LINE 4(215)	04K2		[redacted]	Yes	Jefferson		Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Alabama	LINE 4A216	0462		[redacted]	Yes	Jefferson	[redacted]	Yes
SEO	Georgia	LINE 1A118	0522		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 1A133	0563		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 1A117	0569		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 1B	0605	State Hwy 111	Main-line Block Valve	No	Walker	[redacted]	No
SEO	Georgia	LINE 17A	0633	Albany Int.	Main-line Block Valve	Yes	Dougherty	[redacted]	Yes
SEO	Georgia	LINE 1A104	0543		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 1A130	0563		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 1A116	0563		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 1J	0575	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 1G	0611		Main-line Block Valve	No	Cobb	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 17	0573		Main-line Block Valve	No	Henry	[redacted]	Yes
SEO	Georgia	LINE 20	0508	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 20	0509	Chattanooga Int	Main-line Block Valve	No	Catoosa	[redacted]	No
SEO	Georgia	LINE 17S03	0576		Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 18	0505	Chattanooga Int	Main-line Block Valve	No	Catoosa	[redacted]	No
SEO	Georgia	LINE 20	0508	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 20	0505	Chattanooga Int	Main-line Block Valve	No	Catoosa	[redacted]	No
SEO	Georgia	LINE 20	0508	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 20	0505	Chattanooga Int	Main-line Block Valve	No	Catoosa	[redacted]	No
SEO	Georgia	LINE 18	0505	Chattanooga Int	Main-line Block Valve	Yes	Catoosa	[redacted]	No
SEO	Georgia	LINE 20	0505	Chattanooga Int	Main-line Block Valve	Yes	Catoosa	[redacted]	No
SEO	Georgia	LINE 21	0517	Paces Ferry Road	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 16	0512		Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 14005	0560		Main-line Block Valve	No	Clarke	[redacted]	No
SEO	Georgia	LINE 5	0505	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 20	0505	Rome OR	Main line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 30	0505	Rome Station	Main line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 1/2/28	0543		Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 1	0565	Bremen Station	Injection Block Valve	No	Haralson	[redacted]	No
SEO	Georgia	LINE 16	0575		Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 1/2/28	0612		Main line Block Valve	No	Decatur	[redacted]	Yes
SEO	Georgia	LINE 16	0609		Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 16/22	0583		Main line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 20	0620	Dry Crk Valley Rd	Main line Block Valve	No	Chattooga	[redacted]	No
SEO	Georgia	LINE 17	0579		Main line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 13	0517	Doraville Station	Main line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 20	0605	State Hwy 155	Main line Block Valve	No	Walker	[redacted]	No
SEO	Georgia	LINE 15	0517		Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 16/30	0569		Main line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 16/18	0563		Main line Block Valve	No	DeKalb	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 20	[illegible]	Rome Station	Main-line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 1	[illegible]	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE [illegible]	[illegible]		Main-line Block Valve	No	Decatur	[redacted]	Yes
SEO	Georgia	LINE [illegible]	[illegible]		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE [illegible]	[illegible]		Main-line Block Valve	No	Decatur	[redacted]	Yes
SEO	Georgia	LINE 2	[illegible]	Newton Bridge Road	Main-line Block Valve	No	Clarke	[redacted]	No
SEO	Georgia	LINE 19	[illegible]	Lookout Mtn GP	Main-line Block Valve	Yes	Walker	[redacted]	No
SEO	Georgia	LINE [illegible]	[illegible]		Main-line Block Valve	No	Decatur	[redacted]	Yes
SEO	Georgia	LINE [illegible]	[illegible]		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE [illegible]	[illegible]		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 1	[illegible]	E of Riverside Dr	Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 1	[illegible]	Bremen Station	Injection Block Valve	No	Haralson	[redacted]	No
SEO	Georgia	LINE 2	[illegible]		Main-line Block Valve	No	Clarke	[redacted]	No
SEO	Georgia	LINE 17	[illegible]	N of Lower River Rd	Main-line Block Valve	No	Douglas	[redacted]	No
SEO	Georgia	LINE 1	[illegible]	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 1/1600	0575		Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 13	0517		Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 2	0502	Lawrenceville Station	Main-line Block Valve	No	Gwinnett	[redacted]	No
SEO	Georgia	LINE 2	0503	Lawrenceville Sta	Main-line Block Valve	No	Gwinnett	[redacted]	No
SEO	Georgia	LINE 14/103	0563		Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 14/139	0569		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 15/100	0563		Main-line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 15/100	0511		Main-line Block Valve	No	Decatur	[redacted]	Yes
SEO	Georgia	LINE 19	0505	Bell Fy Centerville R	Main-line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 14/103	0560		Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 16	0575	Hartsfield Dr	Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 1	0503	R2.5-1210 E Broad Rv	Main-line Block Valve	No	Elbert	[redacted]	No
SEO	Georgia	LINE 1/1600	0576		Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 16	0506	Chattanooga Int	Main-line Block Valve	No	Catoosa	[redacted]	No
SEO	Georgia	LINE 15/20A	0512		Main-line Block Valve	No	Decatur	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

								[redacted]	
SEO	Georgia	LINE 17500	0575		Main-line Block Valve	No	Fulton		Yes
SEO	Georgia	LINE 10	0508	Atlanta Int.	Main-line Block Valve	No	Cobb		Yes
SEO	Georgia	LINE 01	0517		Main-line Block Valve	No	DeKalb		Yes
SEO	Georgia	LINE 2	0502	Dacula Station	Main-line Block Valve	No	Gwinnett		No
SEO	Georgia	LINE 16100	0503		Main-line Block Valve	No	DeKalb		Yes
SEO	Georgia	LINE 174	0503	North Albany DP	Main-line Block Valve	No	Dougherty		Yes
SEO	Georgia	LINE 174	0501	North Albany DP	Main-line Block Valve	Yes	Dougherty		Yes
SEO	Georgia	LINE 1	0503	Athens DP	Main-line Block Valve	Yes	Clarke		No
SEO	Georgia	LINE 10104	0503		Main-line Block Valve	No	Fulton		Yes
SEO	Georgia	LINE 2	0503	Dacula Station	Main-line Block Valve	No	Gwinnett		No
SEO	Georgia	LINE 2	0503	Hwy 441	Main-line Block Valve	No	Clarke		No
SEO	Georgia	LINE 2	0503	Danielsville Tee	Main-line Block Valve	Yes	Madison		No
SEO	Georgia	LINE 15	0511		Main-line Block Valve	No	Cobb		Yes
SEO	Georgia	LINE 1	0502	Big Bear Rd W Crossing	Main-line Block Valve	No	Clarke		No
SEO	Georgia	LINE 16113	0503		Main-line Block Valve	No	DeKalb		Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 1	0502	W of Morgan Falls Rd	Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 1	0503	Hwy 441	Main line Block Valve	No	Clarke	[redacted]	No
SEO	Georgia	LINE 1	0503	Quarry Rd W Savannah	Main line Block Valve	No	Ware	[redacted]	No
SEO	Georgia	LINE 14	0508	W of Riverview Rd	Main line Block Valve	No	Liddy	[redacted]	Yes
SEO	Georgia	LINE 15	0505	Rome Station	Main line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 13	0517		Main line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 17	0518	S. Macon Int	Main line Block Valve	No	Bibb	[redacted]	Yes
SEO	Georgia	LINE 17M	0519	South Macon	Main line Block Valve	Yes	Bibb	[redacted]	Yes
SEO	Georgia	LINE 19	0507	Chattanooga Int	Main line Block Valve	No	Catoosa	[redacted]	No
SEO	Georgia	LINE 17	0519	Griffin DP	Main line Block Valve	No	Spalding	[redacted]	Yes
SEO	Georgia	LINE 17	0519	Montezuma Trap Site	Main line Block Valve	No	Macon	[redacted]	Yes
SEO	Georgia	LINE 19	0517	E of Hwy 41	Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 17	0516	Auburndale DP	Main line Block Valve	No	Decatur	[redacted]	Yes
SEO	Georgia	LINE 17	0514	N of Gen McDonald Dr	Main line Block Valve	No	Bibb	[redacted]	Yes
SEO	Georgia	LINE 17	0516	Macon DP	Main line Block Valve	No	Bibb	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 10	0025	Rome Station	Main line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 17	0173		Main line Block Valve	No	Clayton	[redacted]	Yes
SEO	Georgia	LINE 1	0020		Main line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 17	0012	Macon DP	Main line Block Valve	No	Bibb	[redacted]	Yes
SEO	Georgia	LINE 11	0011	Smyrna Station	Main line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 17	0013	Century Road	Main line Block Valve	No	Lee	[redacted]	Yes
SEO	Georgia	LINE 10/20	0020		Main line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 19	0005		Main line Block Valve	No	Catoosa	[redacted]	No
SEO	Georgia	LINE 19	0010		Take-off Valve	No	Catoosa	[redacted]	No
SEO	Georgia	LINE 10/20	0040		Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 20	0020	Bells Ferry Road	Main line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 17	0010	South Albany DP	Main line Block Valve	Yes	Dougherty	[redacted]	Yes
SEO	Georgia	LINE 20	0020	East Armuchee Rd	Main line Block Valve	No	Chattooga	[redacted]	No
SEO	Georgia	LINE 17	0014	N of Stapleton Rd	Main line Block Valve	No	Bibb	[redacted]	Yes
SEO	Georgia	LINE 10	0020	Dry Valley Rd Block C	Main line Block Valve	No	Chattooga	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 12/20	0503		Main line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 14	0509		Main line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 14	0509	Chattahoochee Off	Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 17	0510	Bainbridge Off	Main line Block Valve	Yes	Decatur	[redacted]	Yes
SEO	Georgia	LINE 19	0504	S of Etowah River	Main line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 1	0503	Hwy 15 Rd W Broad Riv	Main line Block Valve	No	Madison	[redacted]	No
SEO	Georgia	LINE 19	0505	Boone Station	Main line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 1	0503	Quary Rd W Savannah	Main line Block Valve	No	Hart	[redacted]	No
SEO	Georgia	LINE 1	0503	Bremen Station	Main line Block Valve	Yes	Haralson	[redacted]	No
SEO	Georgia	LINE 1/1503	0510		Main line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 1	0503	Dacula Station	Main line Block Valve	Yes	Gwinnett	[redacted]	No
SEO	Georgia	LINE 1/1503	0509		Main line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 14	0503	East Armuchee Rd	Main line Block Valve	No	Chattooga	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]		Main-line Block Valve	No	[redacted]	[redacted]	Yes
[redacted]	[redacted]	[redacted]	[redacted]		Take-off Valve	No	[redacted]	[redacted]	Yes
[redacted]	[redacted]	[redacted]	[redacted]		Main-line Block Valve	No	[redacted]	[redacted]	Yes
[redacted]	[redacted]	[redacted]	[redacted]		Main-line Block Valve	No	[redacted]	[redacted]	Yes
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Main-line Block Valve	No	[redacted]	[redacted]	No
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Main-line Block Valve	No	[redacted]	[redacted]	Yes
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Main-line Block Valve	Yes	[redacted]	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 17	0511	Amamosa DP	Take-off Valve	Yes	Sumter	[redacted]	Yes
SEO	Georgia	LINE 30	0503	Rome DP	Main-line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 16/903	0500		Main-line Block Valve	No	Clarke	[redacted]	No
SEO	Georgia	LINE 2	0502	Atlanta Int	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 13	0517	Woodland Branch	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 17	0513	S of Co. Rd. 108	Main-line Block Valve	No	Lee	[redacted]	Yes
SEO	Georgia	LINE 30	0504	W of St Hwy 176	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 16/904	0500		Main-line Block Valve	No	Clarke	[redacted]	No
SEO	Georgia	LINE 2	0505	Bremen Station	Main-line Block Valve	Yes	Haralson	[redacted]	No
SEO	Georgia	LINE 17	0519	South Macon Int	Main-line Block Valve	No	Bibb	[redacted]	Yes
SEO	Georgia	LINE 20	0507	Lookout Mtn DP	Main-line Block Valve	Yes	Walker	[redacted]	No
SEO	Georgia	LINE 1	0505	Atlanta Int	Main-line Block Valve	Yes	Cobb	[redacted]	Yes
SEO	Georgia	LINE 16/902	0500		Main-line Block Valve	No	Clarke	[redacted]	No
SEO	Georgia	LINE 2	0505	Atlanta Int	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 20	0507	Chattanooga Int	Main-line Block Valve	No	Catoosa	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 1	0022	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 30	0029	W of Riverview Rd	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 3	0032	Smyrna Station	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 2	0032	Atlanta Int.	Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 3	0035	Atlanta Int.	Main-line Block Valve	Yes	Cobb	[redacted]	Yes
SEO	Georgia	LINE 17	0073	S of Riverside	Main-line Block Valve	No	Fulton	[redacted]	Yes
SEO	Georgia	LINE 29	0120	Chattanooga Int.	Main-line Block Valve	No	Cherokee	[redacted]	No
SEO	Georgia	LINE 13	0017	Doraville Station	Main-line Block Valve	Yes	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 17	0010	S of Elm River	Main-line Block Valve	No	Mitchell	[redacted]	Yes
SEO	Georgia	LINE 17A03	0079		Main-line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 17	0018	Macon OF	Main-line Block Valve	Yes	Bibb	[redacted]	Yes
SEO	Georgia	LINE 17	0019	NW of Flint River	Main-line Block Valve	No	Macon	[redacted]	Yes
SEO	Georgia	LINE 17	0033	S of Pilcom Farm Rd	Main-line Block Valve	No	Lee	[redacted]	Yes
SEO	Georgia	LINE 16	0004	W of Ocmulgee River	Main-line Block Valve	No	Floyd	[redacted]	Yes
SEO	Georgia	LINE 2	0025	Bremen Station	Main-line Block Valve	Yes	Haralson	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

								[redacted]	
SEO	Georgia	LINE 15	0517	Hill Street	Main line Block Valve	No	Cobb		Yes
SEO	Georgia	LINE 2	0503	Lagoon Lake	Main line Block Valve	No	Paulding		No
SEO	Georgia	LINE 19	0507	Lookout Mtn Dr	Main line Block Valve	No	Walker		No
SEO	Georgia	LINE 17648	0076		Main line Block Valve	No	Fulton		Yes
SEO	Georgia	LINE 17	0019	South Mason Rd	Main line Block Valve	No	Bibb		Yes
SEO	Georgia	LINE 17658	0076		Main line Block Valve	No	Fulton		Yes
SEO	Georgia	LINE 19	0505	Rome OP	Main line Block Valve	No	Floyd		Yes
SEO	Georgia	LINE 1764	0049	South Mason Rd.	Main line Block Valve	Yes	Bibb		Yes
SEO	Georgia	LINE 19	0529		Take-off Valve	No	Catoosa		No
SEO	Georgia	LINE 36	0013		Main line Block Valve	No	Fulton		Yes
SEO	Georgia	LINE 15	0517		Main line Block Valve	No	DeKalb		Yes
SEO	Georgia	LINE 15	0517	Hill Street	Main line Block Valve	No	Cobb		Yes
SEO	Georgia	LINE 15	0511	Smyrna Station	Main line Block Valve	No	Cobb		Yes
SEO	Georgia	LINE 14003	0560		Main line Block Valve	No	Clarke		No
SEO	Georgia	LINE 18	0504	Atlanta Int.	Main line Block Valve	No	Cobb		Yes
SEO	Georgia	LINE 20	0507	Lookout Mtn Dr	Main line Block Valve	No	Walker		No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Georgia	LINE 2	0505	Brownsville Rd (0527.7)	Main line Block Valve	No	Cobb	[redacted]	Yes
SEO	Georgia	LINE 13	0517		Main line Block Valve	No	DeKalb	[redacted]	Yes
SEO	Georgia	LINE 2	0526	Bremen Station	Main line Block Valve	No	Haralson	[redacted]	No
SEO	Georgia	LINE 2	0502	Smyrna Station	Main line Block Valve	Yes	Cobb	[redacted]	Yes
SEO	Georgia	LINE 20	0508	Lookout Mtn DP	Main line Block Valve	No	Walker	[redacted]	No
SEO	Georgia	LINE 17	0530	N of Flint River	Main line Block Valve	No	Baker	[redacted]	Yes
SEO	Georgia	LINE 29	0520	Chattanooga Int	Main line Block Valve	Yes	Catoosa	[redacted]	No
SEO	Tennessee	LINE 04009	0000		Main line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 04209	0002		Main line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 04400	0004		Main line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 19	0003	Wilson Stratton	Main line Block Valve	No	Coffee	[redacted]	No
SEO	Tennessee	LINE 04403	0004		Main line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 04002	0000		Main line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 16	0003	Sweetwater Station	Main line Block Valve	No	Loudon	[redacted]	No
SEO	Tennessee	LINE 19	0003	Maryville Band DP	Main line Block Valve	Yes	Hamilton	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 10	[illegible]	Chattanooga DP	Main-line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 10	[illegible]		Main-line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 10	[illegible]	U.S. [illegible]	Main-line Block Valve	No	McMinn	[redacted]	No
SEO	Tennessee	LINE 10	[illegible]	U.S. [illegible]	Main-line Block Valve	No	Bradley	[redacted]	No
SEO	Tennessee	LINE 10	[illegible]		Block Valve	Unknown	McMinn	[redacted]	No
SEO	Tennessee	LINE 10	[illegible]		Block Valve	Unknown	McMinn	[redacted]	No
SEO	Tennessee	LINE 10	[illegible]	Sweetwater Station	Main-line Block Valve	No	Loudon	[redacted]	No
SEO	Tennessee	LINE 10	[illegible]	Mid Bend Rd S TN Rvr	Main-line Block Valve	No	Loudon	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]		Block Valve	Unknown	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 10	[illegible]	Nashville DP	Main-line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 10	[illegible]	Huff Lacy N TN Rvr	Main-line Block Valve	No	Loudon	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 10	[illegible]	S Nashville DP	Main-line Block Valve	Yes	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 10	[illegible]	Knoxville DP	Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE 10	[illegible]	Sweetwater Station	Main-line Block Valve	Yes	Loudon	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]	Sugarloaf Trap Site	Main-line Block Valve	No	Loudon	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE [illegible]	[illegible]	Sugarloaf Trap Site	Main-line Block Valve	No	Loudon	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]	Chattanooga CP	Main-line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]	Nashville Airport	Main-line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE [illegible]	[illegible]		Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE [illegible]	[illegible]	N Cumberland River	Main-line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE [illegible]	[illegible]	Nashville Airport loc	Main-line Block Valve	No	Davidson	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Tennessee	LINE 19	0603	Hwy 41 1 TN River	Main-line Block Valve	No	Hamilton	[redacted]	Pass
SEO	Tennessee	LINE 04/06	0604		Block Valve	Unknown	Davidson	[redacted]	Pass
SEO	Tennessee	LINE 20	0604	Ashland Oil Co.	Main-line Block Valve	No	Davidson	[redacted]	Pass
SEO	Tennessee	LINE 20	0605	Maple Hwy 27	Main-line Block Valve	No	Hamilton	[redacted]	Pass
SEO	Tennessee	LINE 04/05	0601		Main-line Block Valve	No	Knox	[redacted]	No
SEO	Tennessee	LINE 19	0603	Signal Mountain	Main-line Block Valve	No	Hamilton	[redacted]	Pass
SEO	Tennessee	LINE 19	0605	Chattanooga to Nashville	Main-line Block Valve	No	Grundy	[redacted]	Pass
SEO	Tennessee	LINE 20	0603	Nashville Airport Loc	Main-line Block Valve	No	Davidson	[redacted]	Pass
SEO	Tennessee	LINE 20	0604	Nashville Dif	Main-line Block Valve	Yes	Davidson	[redacted]	Pass
SEO	Tennessee	LINE 04/05	0605		Block Valve	Unknown	Davidson	[redacted]	Pass
SEO	Tennessee	LINE 19	0603	E Nashville Dif	Main-line Block Valve	Yes	Davidson	[redacted]	Pass
SEO	Tennessee	LINE 19	0603		Main-line Block Valve	Yes	Rutherford	[redacted]	Pass
SEO	Tennessee	LINE 04/05	0604		Block Valve	Unknown	Davidson	[redacted]	Pass
SEO	Tennessee	LINE 19	0606	Nashville Dif	Main-line Block Valve	Yes	Davidson	[redacted]	Pass
SEO	Tennessee	LINE 19	0604	Lion Jct.	Main-line Block Valve	No	Davidson	[redacted]	Pass

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

								[redacted]	
SEO	Tennessee	LINE 19	0603	Moccasin Bend Rd	Main line Block Valve	No	Hamilton		Yes
SEO	Tennessee	LINE 20	0603	Cookeville Station	Main line Block Valve	No	Grundy		Yes
SEO	Tennessee	LINE 20	0603	Signal Mountain	Main line Block Valve	No	Hamilton		Yes
SEO	Tennessee	LINE 04203	0602		Main line Block Valve	No	Davidson		Yes
SEO	Tennessee	LINE 19	0603	Cookeville Station	Main line Block Valve	Yes	Grundy		Yes
SEO	Tennessee	LINE 19	0603	Oakdale Rd Ft Myrtle	Main line Block Valve	No	Rutherford		Yes
SEO	Tennessee	LINE 19	0603	S Cumberland Bur	Main line Block Valve	No	Davidson		Yes
SEO	Tennessee	LINE 20	0603	S Cumberland Bur	Main line Block Valve	No	Davidson		Yes
SEO	Tennessee	LINE 04139	0603		Main line Block Valve	No	Knox		No
SEO	Tennessee	LINE 04105	0603		Main line Block Valve	No	Knox		No
SEO	Tennessee	LINE 04139	0603		Main line Block Valve	No	Knox		No
SEO	Tennessee	LINE 19	0606	Exxon Int	Main line Block Valve	No	Davidson		Yes
SEO	Tennessee	LINE 04113	0603		Main line Block Valve	No	Knox		No
SEO	Tennessee	LINE 19	0603	Shafer Hwy 27	Main line Block Valve	No	Hamilton		Yes
SEO	Tennessee	LINE 04007	0600		Main line Block Valve	No	Hamilton		Yes
SEO	Tennessee	LINE 20	0604	East Nashville D.F.	Main line Block Valve	Yes	Davidson		Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Tennessee	LINE 20	0603		Main-line Block Valve	No	Rutherford	[redacted]	Yes
SEO	Tennessee	LINE 04/20B	0603		Main-line Block Valve	No	Bruce	[redacted]	No
SEO	Tennessee	LINE 20	0603	Minor Drueker	Main-line Block Valve	No	Coffee	[redacted]	No
SEO	Tennessee	LINE 20	0603	Bobb Road	Main-line Block Valve	No	Rutherford	[redacted]	Yes
SEO	Tennessee	LINE 20	0603		Main-line Block Valve	No	Rutherford	[redacted]	Yes
SEO	Tennessee	LINE 04/17	0603		Main-line Block Valve	No	Bruce	[redacted]	No
SEO	Tennessee	LINE 04/19	0603		Main-line Block Valve	No	Bruce	[redacted]	No
SEO	Tennessee	LINE 04/40B	0604		Control Valve	Unknown	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 04/41	0604		Control Valve	Unknown	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 04/20	0602		Take-off Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 04/20	0602		Main-line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 20	0603		Main-line Block Valve	No	Rutherford	[redacted]	Yes
SEO	Tennessee	LINE 04/03	0600		Main-line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 04/40B	0604		Block Valve	Unknown	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 10	0603	Signal Mountain	Main-line Block Valve	Yes	Hamilton	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Tennessee	LINE 10	06/03	Silver Grove	Main line Block Valve	No	Coffee	[redacted]	No
SEO	Tennessee	LINE 20	06/04	Nashville DP	Main line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Murfreesboro Station	Main line Block Valve	No	Rutherford	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Moccasin Bend DP	Main line Block Valve	Yes	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Hwy 27 N Tarpaulin Fire	Main line Block Valve	No	Marion	[redacted]	No
SEO	Tennessee	LINE 20	06/04	Line 63	Main line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Moccasin Bend Rd	Main line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 20	06/04	E Nashville to Nashville	Main line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Signal Mountain	Main line Block Valve	No	Hamilton	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Cowlescott Station	Main line Block Valve	Yes	Grundy	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Nashville Airport to Nashvil	Main line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Cowlescott Station	Main line Block Valve	No	Grundy	[redacted]	Yes
SEO	Tennessee	LINE 20	06/04	E Cumberland Rvr	Main line Block Valve	No	Davidson	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03		Main line Block Valve	No	Rutherford	[redacted]	Yes
SEO	Tennessee	LINE 20	06/03	Nashville Airport to Nashvil	Main line Block Valve	No	Davidson	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]								[redacted]	
[redacted]	Tennessee	LINE 20	[redacted]	Equipment Station	Main line Block Valve	No	Grundy		Yes
[redacted]	Tennessee	LINE 19	[redacted]	N Hwy 27	Main line Block Valve	No	Marion		No
[redacted]	Tennessee	LINE [redacted]	[redacted]		Main line Block Valve	No	Davidson		Yes
[redacted]	South Carolina	LINE [redacted]	[redacted]		Main line Block Valve	No	Spartanburg		No
[redacted]	South Carolina	LINE [redacted]	[redacted]	North Augusta	Main line Block Valve	No	Edgefield		No
[redacted]	South Carolina	LINE 29	[redacted]	North Augusta II	Main line Block Valve	No	Edgefield		No
[redacted]	South Carolina	LINE 29	[redacted]	North Augusta OF	Main line Block Valve	Yes	Edgefield		No
[redacted]	South Carolina	LINE [redacted]	[redacted]		Main line Block Valve	No	Spartanburg		No
[redacted]	South Carolina	LINE 29	[redacted]	Belton Jct	Main line Block Valve	No	Anderson		No
[redacted]	South Carolina	LINE [redacted]	[redacted]	Belton Del Line	Main line Block Valve	No	Anderson		No
[redacted]	South Carolina	LINE [redacted]	[redacted]		Main line Block Valve	No	Spartanburg		No
[redacted]	South Carolina	LINE [redacted]	[redacted]		Main line Block Valve	No	Spartanburg		No
[redacted]	South Carolina	LINE 29	[redacted]	Doe Wood Jct	Main line Block Valve	No	Abbeville		No
[redacted]	South Carolina	LINE 2	[redacted]	Belton Jct	Main line Block Valve	Yes	Anderson		No
[redacted]	South Carolina	LINE 2	[redacted]	Simpsonville Wa (3)	Main line Block Valve	Yes	Greenville		Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]									
[redacted]	South Carolina	LINE 2	[redacted]	Pacolet River (2)	Main line Block Valve	No	Spartanburg	[redacted]	No
[redacted]	South Carolina	LINE 2	[redacted]	Simpsonville Sta (1)	Main line Block Valve	No	Greenville	[redacted]	Yes
[redacted]	South Carolina	LINE 2	[redacted]	Enoree River (2)	Main line Block Valve	No	Laurens	[redacted]	No
[redacted]	South Carolina	LINE 2	[redacted]	Gaffney Station	Main line Block Valve	No	Cherokee	[redacted]	No
[redacted]	South Carolina	LINE 2	[redacted]		Main line Block Valve	No	Anderson	[redacted]	No
[redacted]	South Carolina	LINE 1	[redacted]	Pacolet River (2)	Main line Block Valve	No	Spartanburg	[redacted]	No
[redacted]	South Carolina	LINE 74010	[redacted]		Main line Block Valve	No	Spartanburg	[redacted]	No
[redacted]	South Carolina	LINE 1	[redacted]	Anderson Station	Main line Block Valve	No	Anderson	[redacted]	No
[redacted]	South Carolina	LINE 74103	[redacted]	Belton Del Line	Main line Block Valve	No	Anderson	[redacted]	No
[redacted]	South Carolina	LINE 74030	[redacted]		Main line Block Valve	No	Spartanburg	[redacted]	No
[redacted]	South Carolina	LINE 74108	[redacted]	Belton Del Line	Main line Block Valve	No	Anderson	[redacted]	No
[redacted]	South Carolina	LINE 1	[redacted]	Enoree River (2)	Main line Block Valve	No	Laurens	[redacted]	No
[redacted]	South Carolina	LINE 1	[redacted]	Broad River (2)	Main line Block Valve	No	Cherokee	[redacted]	No
[redacted]	South Carolina	LINE 1	[redacted]	Belton Int.	Main line Block Valve	No	Anderson	[redacted]	No
[redacted]	South Carolina	LINE 1	[redacted]	Pacolet River (2)	Main line Block Valve	No	Spartanburg	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SE0	North Carolina	LINE 2	0802	Lexington Sta 1/75	Main line Block Valve	No	Davidson	[redacted]	Yes
SE0	North Carolina	LINE 2	0802	Greensboro Int.	Main line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 2	0802	Yadkin River 1/75	Main line Block Valve	No	Davidson	[redacted]	Yes
SE0	North Carolina	LINE 2	0802	Kannapolis Sta.	Main line Block Valve	No	Cabarrus	[redacted]	Yes
SE0	North Carolina	LINE 84/111	0840		Main line Block Valve	No	Mecklenburg	[redacted]	Yes
SE0	North Carolina	LINE 2	0802	Charlotte Tank Farm	Main line Block Valve	Yes	Mecklenburg	[redacted]	Yes
SE0	North Carolina	LINE 2	0802	South Deep River	Main line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 4	0803	Greensboro Station	Main line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 2	0802	Coddle Creek 1/75	Main line Block Valve	No	Cabarrus	[redacted]	Yes
SE0	North Carolina	LINE 84/100	0803		Injection Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 84/112	0803		Main line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 84/114	0803		Main line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 2	0802	South Fork River 1/75	Injection Block Valve	No	Gaston	[redacted]	No
SE0	North Carolina	LINE 5	0805	Lake Norman Road	Main line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 5	0805	Gastonia Station	Main line Block Valve	Yes	Gaston	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Guilford	[redacted]	Yes
SEO	North Carolina	LINE 2	[illegible]	Gastonia Station U/S	Main-line Block Valve	No	Gaston	[redacted]	No
SEO	North Carolina	LINE 1	[illegible]	Charlotte T.F. (2)	Main-line Block Valve	Yes	Mecklenburg	[redacted]	Yes
SEO	North Carolina	LINE 2	[illegible]	Yadkin River U/S	Main-line Block Valve	No	Rowan	[redacted]	No
SEO	North Carolina	LINE 2	[illegible]	Lake Wright U/S	Main-line Block Valve	No	Rowan	[redacted]	No
SEO	North Carolina	LINE 2	[illegible]	Catawba River U/S	Injection Block Valve	No	Gaston	[redacted]	No
SEO	North Carolina	LINE 2	[illegible]	Kannapolis Sta U/S	Main-line Block Valve	No	Cabarrus	[redacted]	Yes
SEO	North Carolina	LINE 2	[illegible]	Lexington Sta	Main-line Block Valve	Yes	Davidson	[redacted]	Yes
SEO	North Carolina	LINE 2	[illegible]	Lexington Sta	Main-line Block Valve	No	Davidson	[redacted]	Yes
SEO	North Carolina	LINE 2	[illegible]	Kannapolis Sta	Main-line Block Valve	Yes	Cabarrus	[redacted]	Yes
SEO	North Carolina	LINE 240	[illegible]	N. of Hwy 1412	Main-line Block Valve	No	Hannelli	[redacted]	Yes
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Yes
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Yes
SEO	North Carolina	LINE 15	[illegible]	Gilead Church Rd	Main-line Block Valve	No	Chatham	[redacted]	No
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Wake	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SE0	North Carolina	LINE 24	0806	Rock Rest Road	Main line Block Valve	No	Chatham	[redacted]	No
SE0	North Carolina	LINE 24	0806	Gilead Church Rd	Main line Block Valve	No	Chatham	[redacted]	No
SE0	North Carolina	LINE 1	0809	Catawba River U/S	Main line Block Valve	No	Mecklenburg	[redacted]	Fee
SE0	North Carolina	LINE 1	0802	Lickilly Creek	Main line Block Valve	No	Cabarrus	[redacted]	Fee
SE0	North Carolina	LINE 94/107	0843		Main line Block Valve	No	Guilford	[redacted]	Fee
SE0	North Carolina	LINE 23	0806	Farrington Road	Main line Block Valve	No	Chatham	[redacted]	No
SE0	North Carolina	LINE 1	0805	Greensboro Station	Main line Block Valve	No	Guilford	[redacted]	Fee
SE0	North Carolina	LINE 94/117	0860		Main line Block Valve	No	Mecklenburg	[redacted]	Fee
SE0	North Carolina	LINE 94/132	0860		Main line Block Valve	No	Mecklenburg	[redacted]	Fee
SE0	North Carolina	LINE 91/132	0862		Main line Block Valve	No	Wake	[redacted]	Fee
SE0	North Carolina	LINE 1	0802	Yadkin River U/S	Main line Block Valve	No	Rowan	[redacted]	No
SE0	North Carolina	LINE 1	0805	South Fork River U/S	Main line Block Valve	No	Gaston	[redacted]	No
SE0	North Carolina	LINE 94/131	0860		Main line Block Valve	No	Mecklenburg	[redacted]	Fee
SE0	North Carolina	LINE 1	0802	South Deep River	Main line Block Valve	No	Guilford	[redacted]	Fee
SE0	North Carolina	LINE 1	0802	Yadkin River U/S	Main line Block Valve	No	Davidson	[redacted]	Fee

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SE0	North Carolina	LINE 1	[illegible]	Kannapolis Sta	Main-line Block Valve	Yes	Cabarrus	[redacted]	Yes
SE0	North Carolina	LINE 1	[illegible]	Lake Wright S/S	Main-line Block Valve	No	Rowan	[redacted]	No
SE0	North Carolina	LINE 1	[illegible]	Lexington Station	Main-line Block Valve	Yes	Davidson	[redacted]	Yes
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Yes
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 23	[illegible]	S of CSX RR, NC 1011	Main-line Block Valve	No	Wake	[redacted]	Yes
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Yes
SE0	North Carolina	LINE 23	[illegible]	N. of Hwy 64	Main-line Block Valve	No	Wake	[redacted]	Yes
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Johnston	[redacted]	Yes
SE0	North Carolina	LINE 3	[illegible]	Greensboro S/S	Main-line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Yes
SE0	North Carolina	LINE 1	[illegible]	Catawba River S/S	Main-line Block Valve	No	Gaston	[redacted]	No
SE0	North Carolina	LINE 1	[illegible]	North Deep River	Main-line Block Valve	No	Guilford	[redacted]	Yes
SE0	North Carolina	LINE 1	[illegible]	Kannapolis Sta S/S	Main-line Block Valve	No	Cabarrus	[redacted]	Yes
SE0	North Carolina	LINE 23	[illegible]	S. of Crabtree Lake	Main-line Block Valve	No	Wake	[redacted]	Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Johnston	[redacted]	Pass
SE0	North Carolina	LINE 23	[illegible]	Apex Station	Main-line Block Valve	No	Wake	[redacted]	Pass
SE0	North Carolina	LINE 23	[illegible]	[illegible]	Main-line Block Valve	No	Wake	[redacted]	Pass
SE0	North Carolina	LINE 23	[illegible]	Farrington Road	Main-line Block Valve	No	Chatham	[redacted]	No
SE0	North Carolina	LINE 3	[illegible]	Charlotte T.P. [illegible]	Main-line Block Valve	No	Mecklenburg	[redacted]	Pass
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Guilford	[redacted]	Pass
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Guilford	[redacted]	Pass
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Pass
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Guilford	[redacted]	Pass
SE0	North Carolina	LINE 249	[illegible]	Fayetteville Station	Main-line Block Valve	No	Cumberland	[redacted]	Pass
SE0	North Carolina	LINE 23	[illegible]		Main-line Block Valve	Yes	Guilford	[redacted]	Pass
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Guilford	[redacted]	Pass
SE0	North Carolina	LINE 34	[illegible]	Liberty Pump Station	Main-line Block Valve	No	Mecklenburg	[redacted]	Pass
SE0	North Carolina	LINE 23	[illegible]	Apex Incoming	Main-line Block Valve	No	Wake	[redacted]	Pass
SE0	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Wake	[redacted]	Pass

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Mecklenburg	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Johnston	[redacted]	Pass
SEO	North Carolina	LINE 14	[illegible]		Main-line Block Valve	No	Wake	[redacted]	Pass
SEO	North Carolina	LINE 14P	[illegible]	Fayetteville Station	Main-line Block Valve	No	Cumberland	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 3	[illegible]	Reidsville Station	Main-line Block Valve	No	Rockingham	[redacted]	No
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Johnston	[redacted]	Pass
SEO	North Carolina	LINE 23	[illegible]		Main-line Block Valve	No	Wake	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Cumberland	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Johnston	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Johnston	[redacted]	Pass
SEO	North Carolina	LINE [illegible]	[illegible]		Main-line Block Valve	No	Johnston	[redacted]	Pass

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	North Carolina	LINE 23	0806	Liberty Pump Station	Main line Block Valve	No	Alamance	[redacted]	Pass
SEO	North Carolina	LINE 84136	0903		Main line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 84138	0903		Main line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 84133	0903		Main line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 24	0806	Apex Incoming	Main line Block Valve	Yes	Wake	[redacted]	Pass
SEO	North Carolina	LINE 109	0808	Lillington Station	Main line Block Valve	Yes	Harnett	[redacted]	Pass
SEO	North Carolina	LINE 84135	0903		Main line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 24	0806	Greensboro Station	Main line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 84138	0903		Main line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 84100	0903		Injection Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 84303	0903		Main line Block Valve	No	Johnston	[redacted]	Pass
SEO	North Carolina	LINE 22	0806		Main line Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 84133	0903		Block Valve WKM	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 84130	0903		W.K.M Block Valve	No	Guilford	[redacted]	Pass
SEO	North Carolina	LINE 84003	0800		Main line Block Valve	No	Mecklenburg	[redacted]	Pass
SEO	North Carolina	LINE 84403	0904		Main line Block Valve	No	Wake	[redacted]	Pass

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SED	North Carolina	LINE 06/114	0063		Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 06/116	0063		Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 06/113	0063		Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 06/120	0063		Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 06/118	0063		Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 06/122	0063		Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 06/119	0063		Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 22	0067	Selma Station (In)	Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 22	0066	Apex Station (2)	Main line Block Valve	No	Wake	[redacted]	Pass
SED	North Carolina	LINE 22	0067	Apex Station (1)	Main line Block Valve	No	Wake	[redacted]	Pass
SED	North Carolina	LINE 22	0067	Selma Trap Inlet	Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 06/111	0063		Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 22	0067	W. of Hwy 70 A	Main line Block Valve	No	Johnston	[redacted]	Pass
SED	North Carolina	LINE 22	0066	Gilead Church Rd	Main line Block Valve	No	Chatham	[redacted]	No
SED	North Carolina	LINE 22	0066	Liberty Pump Station	Main line Block Valve	No	Wake	[redacted]	Pass
SED	North Carolina	LINE 22	0066	Buck Rock Rd	Main line Block Valve	No	Chatham	[redacted]	No

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

								[redacted]	
SEO	North Carolina	LINE 22	0806	Farrington Rd	Main line Block Valve	No	Chatham		No
SEO	North Carolina	LINE 06/327	0903		Main line Block Valve	No	Johnston		Yes
SEO	North Carolina	LINE 06/330	0903		Main line Block Valve	No	Johnston		Yes
SEO	North Carolina	LINE 06/399	0903		Main line Block Valve	No	Johnston		Yes
SEO	North Carolina	LINE 06/308	0903		Main line Block Valve	No	Johnston		Yes
SEO	North Carolina	LINE 06/302	0903		Main line Block Valve	No	Johnston		Yes
SEO	North Carolina	LINE 2/0	0908	Apex Station	Main line Block Valve	No	Wake		Yes
SEO	North Carolina	LINE 06/308	0903		Main line Block Valve	No	Johnston		Yes
SEO	North Carolina	LINE 06/328	0903		Main line Block Valve	No	Johnston		Yes
SEO	North Carolina	LINE 04/329	0949		Main line Block Valve	No	Cumberland		Yes
SEO	North Carolina	LINE 06/320	0903		Main line Block Valve	No	Johnston		Yes
SEO	North Carolina	LINE 06/307	0903		Main line Block Valve	No	Johnston		Yes
SEO	Virginia	LINE 4	0903	Sign Board W Hwy 639	Main line Block Valve	No	Pittsylvania		Yes
SEO	Virginia	LINE 4	0903	Mill Station	Main line Block Valve	No	Pittsylvania		Yes
SEO	Virginia	LINE 4	0903	Hickory Grove Sta	Main line Block Valve	No	Halifax		Yes
SEO	Virginia	LINE 4	0903	Hickory Grove Sta	Main line Block Valve	Yes	Halifax		Yes

Colonial Pipeline Company

BLOCK VALVE LOCATIONS

SEO	Virginia	LINE 4	0905	Hickory Grove Rd	Main line Block Valve	No	Halifax	[redacted]	Fair
SEO	Virginia	LINE 4	0903	Dan River W Hwy 671	Main line Block Valve	No	Pittsylvania	[redacted]	Fair
SEO	Virginia	LINE 4	0903	S. of Staunton Riv	Main line Block Valve	No	Halifax	[redacted]	Fair
SEO	Virginia	LINE 3	0903	West of VA 672	Main line Block Valve	No	Pittsylvania	[redacted]	Fair
SEO	Virginia	LINE 3	0903	Mill Dep. Outgoing	Main line Block Valve	No	Pittsylvania	[redacted]	Fair
SEO	Virginia	LINE 3	0903	South of VA Hwy 670	Main line Block Valve	No	Pittsylvania	[redacted]	Fair
SEO	Virginia	LINE 3	0903	West of VA 40	Main line Block Valve	No	Halifax	[redacted]	Fair
SEO	Virginia	LINE 3	0903	Hickory Grove Ste	Main line Block Valve	Yes	Halifax	[redacted]	Fair
SEO	Virginia	LINE 3	0903		Main line Block Valve	Yes	Pittsylvania	[redacted]	Fair
SEO	Virginia	LINE 3	0903	Mill Dep. Incoming	Main line Block Valve	No	Pittsylvania	[redacted]	Fair

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0400 AL	0401	[redacted]	0401198	CR 21	SAL010	AL-4	[redacted]		Lx 1	[redacted]	Lx 2	[redacted]		
0400 AL	0401		0401230	CR 20	SAL013	AL-5			Lx 1		Lx 2			
0400 AL	0449		0449010	Bolgee Delivery	SAL013	AL-5			Lx 1		Lx 2			
0400 AL	0401		0401258	Curve Lane (CR133)	SAL015	AL-7			Lx 1		Lx 2			
0400 AL	0401		0401343	Hwy 11	SAL019	AL-8			Lx 1		Lx 2			
0400 AL	0401		0401399	Morris Landing Rd	SAL022	AL-9			Lx 1		Lx 2			
0400 AL	0401		0401448	Cutt off Rd	SAL025	AL-10			Lx 1		Lx 2			
0400 AL	0420		0420010	Moundville Station	SAL027	AL-10			Lx 1		Lx 2			
0400 AL	0420		0420020	Moundville Station	SAL027	AL-10			Lx 1		Lx 2			
0400 AL	0401		0401522	CR 56, Moundville Station	SAL029	AL-11			Lx 1		Lx 2			
0400 AL	0401		0401551	Salem Cemetery Rd	SAL030	AL-11			Lx 1		Lx 2			
0400 AL	0401		0401588	TNF 116 706	SAL032	AL-12			Lx 1		Lx 2			
0400 AL	0401		0401666	Hagler Cooling Rd	SAL037	AL-13			Lx 1		Lx 2			
0400 AL	0401		0401718	Meadows Rd	SAL039	AL-14			Lx 1		Lx 2			
0400 AL	0401		0401730	Kolher Rd	SAL040	AL-14			Lx 1		Lx 2			
0400 AL	0401		0401739	Hwy 9	SAL040	AL-15			Lx 1		Lx 2			
0400 AL	0424		0424010	Vance Station	SAL040	AL-16			Lx 1		Lx 2			
0400 AL	0401		0401774	Hermitage Lane	SAL042	AL-15			Lx 1		Lx 2			
0400 AL	0401		0401780	CR. 27	SAL043	AL-16			Lx 1		Lx 2			
0400 AL	0401		0401813	Old Woodstock Rd	SAL044	AL-16			Lx 1		Lx 2			
0400 AL	0401		0401854	Cherokee Rd	SAL047	AL-17			Lx 1		Lx 2			
0400 AL	0401		0401873	River Rd	SAL048	AL-17			Lx 1		Lx 2			
0400 AL	0401		0401896	Southern Lane	SAL049	AL-17			Lx 1		Lx 2			
0400 AL	0401		0401958	Copper Head Rd	SAL052	AL-20			Lx 1		Lx 2			
0400 AL	0401		0401971	Scurlock Rd	SAL053	AL-20			Lx 1		Lx 2			
0400 AL	0421		0421010	Pelham Station Control Building	SAL055	AL-20			Lx 1		Lx 2			
0400 AL	0421		0421020	Pelham Station #1 SS Building	SAL055	AL-20			Lx 1		Lx 2			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0400 AL	0421	[redacted]	0421030	Pelham Station #2 S/S Building	SAL000	AL-20	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0400 AL	0421		0421040	Pelham Tank 214	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0421		0421050	Pelham Tank 211	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0421		0421060	Pelham Tank 215	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0421		0421070	Pelham Tank 272	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0421		0421080	Pelham Tank 210	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0421		0421090	Pelham Tank 271	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0421		0421100	Pelham Tank 212	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0421		0421110	Pelham Tank 270	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0421		0421120	Pelham Sta. behind warehouse	SAL000	AL-20			Ln 1		Ln 2			
0400 AL	0402		0402042	Yeager Drive	SAL008	AL-20			Ln 1		Ln 2			
0400 AL	0402		0402100	Matador Drive	SAL008	AL-21			Ln 1		Ln 2			
0400 AL	0402		0402223	CR 32	SAL002	AL-22			Ln 1		Ln 2			
0400 AL	0402		0402270	Cheshire Rd	SAL004	AL-22			Ln 1		Ln 2			
0400 AL	0402		0402310	Deer Wood Lake Rd	SAL005	AL-23			Ln 1		Ln 2			
0400 AL	0402		0402329	Reynolds Rd	SAL005	AL-24			Ln 1		Ln 2			
0400 AL	0402		0402370	Vincent Cow Pasture	SAL007	AL-24			Ln 1		Ln 2			
0400 AL	0402		0402410	Gaware Ferry Rd	SAL008	AL-25			Ln 1		Ln 2			
0400 AL	0402		0402451	Co-Rd 191 by Trailer	SAL009	AL-25			Ln 1		Ln 2			
0400 AL	0425		0425010	St. Ives Station	SAL071	AL-25			Ln 1		Ln 2			
0400 AL	0425		0425020	St. Ives Station	SAL071	AL-25			Ln 1		Ln 2			
0400 AL	0402		0402503	Hwy 43 Rentrx	SAL073	AL-26			Ln 1		Ln 2			
0400 AL	0402		0402550	Hwy 77	SAL076	AL-26			Ln 1		Ln 2			
0400 AL	0402		0402570	Jackson Trace	SAL077	AL-27			Ln 1		Ln 2			
0400 AL	0402		0402706	Rocky Ridge	SAL078	AL-28			Ln 1		Ln 2			
0400 AL	0402		0402736	Eskatonga Rd	SAL079	AL-28			Ln 1		Ln 2			
0400 AL	0402		0402769	Curry Station Rd	SAL080	AL-29			Ln 1		Ln 2			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire Port	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0400 AL	0402	[redacted]	0402/768	Watts Rd	SAL001	AL-29	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0400 AL	0402		0402969	Silver Run Rd	SAL003	AL-29			Ln 1		Ln 2			
0400 AL	0402		0402990	H.J. Bentley Parkway	SAL004	AL-29			Ln 1		Ln 2			
0400 AL	0402		0402995	Fab-Arc Steel	SAL005	AL-30			Ln 1		Ln 2			
0400 AL	0402		0402010	Oxford Station	SAL006	AL-30			Ln 1		Ln 2			
0400 AL	0403		0403032	Tower Rd	SAL008	AL-30			Ln 1		Ln 2			
0400 AL	0403		0403010	Oxford Delivery	SAL009	AL-30			Ln 1		Ln 2			
0400 AL	0403		0403002	Sunny Eve	SAL009	AL-30			Ln 1		Ln 2			
0400 AL	0403		0403175	Bennett Farm	SAL000	AL-31			Ln 1		Ln 2			
0400 AL	0403		0403215	Highland Lake	SAL001	AL-31			Ln 1		Ln 2			
0400 AL	0403		0403342	Bonner Lake Rd	SAL002	AL-31			Ln 1		Ln 2			
0400 AL	0403		0403413	State Hwy 9	SAL003	AL-33			Ln 1		Ln 2			
0400 AL	0403		0403406	Evans Bridge Rd	SAL004	AL-33			Ln 1		Ln 2			
0400 AL	0403		0403533	Old Bowden Rd	SAL005	AL-33			Ln 1		Ln 2			
0400 AL	0403		0403522	CR 18	SAL006	AL-33			Ln 1		Ln 2			
0400 AL	0403		0403575	Co-Rd 122/ Jimmy Howle	SAL006	AL-33			Ln 1		Ln 2			
0400 AL	0403		0403610	Hwy 48	SAL006	AL-33			Ln 1		Ln 2			
0400 AL	0426		0426010	Heller Station	SAL006	AL-33			Ln 1		Ln 2			
0400 AL	0403		0403743	Hwy 439	SAL008	AL-34			Ln 1		Ln 2			
0400 AL	0403		0403768	CR 437/ Hunting Club	SAL008	AL-34			Ln 1		Ln 2			
0400 AL	0403		0403775	CR 437	SAL008	AL-34			Ln 1		Ln 2			
0400 AL	0403		0403827	CR 66 Pasture	SAL009	AL-34			Ln 1		Ln 2			
0400 AL	0403		0403829	CR 446, Pounds Mill Rd	SAL100	AL-34			Ln 1		Ln 2			
0400 AL	0403		0403841	CR 37	SAL100	AL-35			Ln 1		Ln 2			
0400 AL	0403		0403853	CR 697 Wally Creek	SAL101	AL-35			Ln 1		Ln 2			
0400 AL	0403		0403879	CR 642 State Line	SAL101	AL-35			Ln 1		Ln 2	[redacted]		
0400 AL	0421		0405126	Pelham Jct-B'ham Del – Helena Jct	SAL301	AL-35			Ln 12					
0400 AL	0445		0445010	Birmingham Del	SAL307	BRM-2			Ln 12					

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
9500 GA	0501	[redacted]	0501027	Providence Church Rd	5GA002	AL-35	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
9500 GA	0501	[redacted]	0501059	Old Hwy 100	5GA002	AL-35	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501106	Hwy 100	5GA003	AL-35	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501147	Budapest Rd	5GA004	GA-2	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501201	Nitra Rd	5GA004	GA-2	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501221	Old Bushmill Rd	5GA006	GA-2	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501235	Waddell St	5GA006	GA-2	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501258	Noel Cash Rd	5GA006	GA-3	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501264	Waterworks Rd	5GA007	GA-2	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501309	Old Hamilton Mill Rd	5GA007	GA-2	[redacted]		Ln 1		Ln 2			
9500 GA	0521	[redacted]	0521010	Bremen Station	5GA007	GA-2	[redacted]		Ln 1		Ln 2			
9500 GA	0521	[redacted]	0521020	Bremen Station Relief Tank	5GA007	GA-2	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501361	Little View Church Rd	5GA009	GA-4	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501405	Liberty Church Rd	5GA010	GA-4	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501452	Fortenberry Rd	5GA011	GA-4	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501508	Taylors Gin Rd	5GA012	GA-5	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501538	Hwy 101 Rockmart Rd	5GA013	GA-5	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501564	Legion Lake Rd	5GA013	GA-5	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501585	Old Milltown Rd	5GA014	GA-5	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501632	Townsend Rd	5GA015	GA-5	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501641	Mulberry Rock Rd	5GA015	GA-5	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501686	Hitchcock Rd	5GA016	GA-6	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501689	Fate Fuller Rd	5GA016	GA-6	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501713	Bob Hunton Rd	5GA017	GA-6	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501731	Dallas Nebo Rd	5GA017	GA-6	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501754	Mill Creek Rd	5GA018	GA-6	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501770	Hughes Rd	5GA018	GA-6	[redacted]		Ln 1		Ln 2			
9500 GA	0501	[redacted]	0501800	Laird Rd	5GA019	GA-6	[redacted]		Ln 1		Ln 2			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0500 GA	0520	[redacted]	0520010	Atlanta Junction Switchgear	5GA023	GA-7	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0500 GA	0520		0520020	Atlanta Junction Piping	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520030	Atlanta Junction Oil Tanks	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520040	Atlanta Junction Gas Tanks	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520050	Atlanta Junction Gas Tanks	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520060	Atlanta Junction Cntrl Room	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520065	Atlanta Junction Lagoon 1	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520066	Atlanta Junction Lagoon 2	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520068	Atlanta Junction Manifold Piping	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520316	Atlanta Junction Tank 316	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520317	Atlanta Junction Tank 317	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520333	Atlanta Junction Tank 333	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520335	Atlanta Junction Tank 335	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520339	Atlanta Junction Tank 339	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520354	Atlanta Junction Tank 354	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520375	Atlanta Junction Tank 375	5GA023	GA-7			Ln 1		Ln 2			
0500 GA	0520		0520379	Atlanta Junction Tank 379	5GA023	GA-7			Ln 1		Ln 2			[redacted]
0500 GA	0502		0502019	East-West Connector	5GA025	GA-8			Ln 1		Ln 2		Ln 05	
0500 GA	0502		0502050	Crescent Rd	5GA028	GA-11			Ln 1		Ln 2			
0500 GA	0502		0502060	Gann Rd	5GA030	GA-8			Ln 1		Ln 2		Ln 05	
0500 GA	0502		0502066	Cedar Cliff Rd	5GA031	GA-8			Ln 1		Ln 2		Ln 05	
0500 GA	0523		0523010	Smyrna Station	5GA034	GA-10			Ln 1		Ln 2			
0500 GA	0502		0502155	Powers Ferry Rd	5GA035	GA-10			Ln 1		Ln 2			
0500 GA	0502		0502177	Jogging Trail	5GA049	GA-10			Ln 1		Ln 2			
0500 GA	0502		0502227	Riverside Dr.	5GA051	GA-10			Ln 1		Ln 2			
0500 GA	0502		0502255	Hidden Branches	5GA056	GA-11			Ln 1		Ln 2			
0500 GA	0502		0502344	Peachtree Corners	5GA057	GA-11			Ln 1		Ln 2			

Colonial Pipeline Company

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State	Loc Code	Mile Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
9500 GA	0502	[redacted]	0502334	Jay Bird Alley	5GA063	GA-12	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
9500 GA	0502		0502433	Davenport Rd.	5GA063	GA-12			Ln 1		Ln 2			
9500 GA	0502		0502447	Commerce Dr.	5GA065	GA-13			Ln 1		Ln 2			
9500 GA	0502		0502456	Evergreen Blvd	5GA070	GA-13			Ln 1		Ln 2			
9500 GA	0502		0502517	Riverside Pkwy	5GA075	GA-13			Ln 1		Ln 2			
9500 GA	0502		0502578	Boulderbrook Circle	5GA076	GA-14			Ln 1		Ln 2			
9500 GA	0502		0502591	Hwy 20	5GA078	GA-14			Ln 1		Ln 2			
9500 GA	0502		0502610	Dacula Station	5GA079	GA-14			Ln 1		Ln 2			
9500 GA	0502		0502621	Harbins Rd.	5GA079	GA-14			Ln 1		Ln 2			
9500 GA	0502		0502640	Drowning Creek Rd.	5GA079	GA-15			Ln 1		Ln 2			
9500 GA	0502		0502662	Kilminsa Rd.	5GA081	GA-15			Ln 1		Ln 2			
9500 GA	0502		0502721	Hazelmere Dr.	5GA082	GA-15			Ln 1		Ln 2			
9500 GA	0502		0502744	Fort Yargo (AF)	5GA083	GA-16			Ln 1		Ln 2			
9500 GA	0502		0502752	Fort Yargo State Park	5GA083	GA-16			Ln 1		Ln 2			
9500 GA	0502		0502759	Hwy 11	5GA084	GA-16			Ln 1		Ln 2			
9500 GA	0502		0502774	Golf Course Rd.	5GA084	GA-23			Ln 1		Ln 2			
9500 GA	0502		0502776	Golf Course (AF)	5GA084	GA-16			Ln 1		Ln 2			
9500 GA	0502		0502808	Cosby Rd.	5GA086	GA-16			Ln 1		Ln 2			
9500 GA	0502		0502840	Pleasant Hill Church Rd.	5GA087	GA-17			Ln 1		Ln 2			
9500 GA	0502		0502869	Jefferson Rd.	5GA088	GA-17			Ln 1		Ln 2			
9500 GA	0502		0502882	Arnold Rd.	5GA088	GA-17			Ln 1		Ln 2			
9500 GA	0502		0502890	Nat Kinney Rd.	5GA089	GA-17			Ln 1		Ln 2			
9500 GA	0502		0502900	Savage Rd.	5GA089	GA-17			Ln 1		Ln 2			
9500 GA	0502		0502932	Big Bear Rd.	5GA090	GA-17			Ln 1		Ln 2			
9500 GA	0502		0502946	Middle Oconee River (AF)	5GA091	GA-18			Ln 1		Ln 2			
9500 GA	0502		0502947	East of Oconee River	5GA091	GA-18			Ln 1		Ln 2			
9500 GA	0502		0502961	Tallassee Rd.	5GA091	GA-18			Ln 1		Ln 2			
9500 GA	0502		0502974	Quail Run	5GA092	GA-19			Ln 1		Ln 2			

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0500 GA	0502	[redacted]	0502994	Hwy 129	5GA063	GA-18	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0500 GA	0503		0541010	Athens Delivery	5GA067	GA-18			Ln 1		Ln 2			
0500 GA	0503		0503001	Athens Delivery AF	5GA067	GA-18			Ln 1		Ln 2			
0500 GA	0503		0503027	Newton Bridge Rd	5GA072	GA-18			Ln 1		Ln 2			
0500 GA	0503		0503041	Paradise Valley Ln	5GA074	GA-19			Ln 1		Ln 2			
0500 GA	0503		0503049	Hwy 441	5GA074	GA-19			Ln 1		Ln 2			
0500 GA	0503		0503064	Cherokee Forest Dr	5GA074	GA-19			Ln 1		Ln 2			
0500 GA	0503		0503068	Smokey Rd (AF)	5GA080	GA-20			Ln 1		Ln 2			
0500 GA	0503		0503105	Nuwatchee Creek Road	5GA080	GA-20			Ln 1		Ln 2			
0500 GA	0503		0503119	Smokey Rd	5GA080	GA-20			Ln 1		Ln 2			
0500 GA	0503		0503135	Old Church Rd	5GA086	GA-20			Ln 1		Ln 2			
0500 GA	0503		0503155	Hwy 106	5GA086	GA-20			Ln 1		Ln 2			
0500 GA	0503		0503208	Billy Gilbert Rd	5GA087	GA-20			Ln 1		Ln 2			
0500 GA	0503		0503222	Buddy Moore Rd	5GA088	GA-20			Ln 1		Ln 2			
0500 GA	0503		0503257	West Kellogg Dr	5GA088	GA-20			Ln 1		Ln 2			
0500 GA	0503		0503284	Monett Church Rd	5GA089	GA-20			Ln 1		Ln 2			
0500 GA	0503		0524010	Danielsville Station	5GA098	GA-21			Ln 1		Ln 2			
0500 GA	0503		0503300	Danielsville Station AF (Colonial Dr)	5GA099	GA-21			Ln 1		Ln 2			
0500 GA	0503		0503317	Double Branch Rd	5GA100	GA-21			Ln 1		Ln 2			
0500 GA	0503		0503338	Danielsville Rd	5GA100	GA-21			Ln 1		Ln 2			
0500 GA	0503		0503337	Danielsville Rd (AF)	5GA100	GA-21			Ln 1		Ln 2			
0500 GA	0503		0503358	Hwy 98	5GA100	GA-21			Ln 1		Ln 2			
0500 GA	0503		0503379	Draper Rd	5GA101	GA-21			Ln 1		Ln 2			
0500 GA	0503		0503449	Herbert Miller Rd	5GA102	GA-22			Ln 1		Ln 2			
0500 GA	0503		0503497	Davids Home Church Rd	5GA103	GA-22			Ln 1		Ln 2			
0500 GA	0503		0503508	Hickory Nut lane	5GA104	GA-23			Ln 1		Ln 2			
0500 GA	0503		0503531	Parham Town Rd	5GA104	GA-23			Ln 1		Ln 2			
0500 GA	0503		0503575	Hwy 172	5GA104	GA-23			Ln 1		Ln 2			

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0500 GA	0503	[redacted]	0503109	Corinth Church Rd	5GA105	GA.23	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0500 GA	0503		0503711	Hendricks Rd	5GA106	GA.23			Ln 1		Ln 2			
0500 GA	0503		0503625	West Church Street	5GA108	GA.23			Ln 1		Ln 2			
0500 GA	0503		0503658	Bowman Hwy	5GA107	GA.23			Ln 1		Ln 2			
0500 GA	0503		0503708	Liberty Church Rd	5GA108	GA.24			Ln 1		Ln 2			
0500 GA	0503		0503730	Wakefield Farm Off Hwy 172	5GA108	GA.24			Ln 1		Ln 2			
0500 GA	0503		0503755	Elias P. Jenkins (AF)	5GA109	GA.25			Ln 1		Ln 2			
0500 GA	0503		0503764	Elias P. Jenkins	5GA109	GA.25			Ln 1		Ln 2			
0500 GA	0503		0503777	Shiloh Church Rd	5GA109	GA.25			Ln 1		Ln 2			
0500 GA	0503		0503808	Bio Church Rd	5GA110	GA.25			Ln 1		Ln 2			
0500 GA	0503		0503829	Steven Johnson Rd	5GA111	GA.25			Ln 1		Ln 2			
0500 GA	0503		0503846	Hwy 77	5GA111	GA.25			Ln 1		Ln 2			
0500 GA	0503		0503863	Whippoorwill Trail	5GA112	GA.26			Ln 1		Ln 2			
0500 GA	0503		0503880	Whippoorwill Trail (AF)	5GA112	GA.26			Ln 1		Ln 2			
0500 GA	0503		0503924	Sewerright Dairy Farm (AF)	5GA113	GA.26			Ln 1		Ln 2			
0500 GA	0503		0503945	Sewerright Dairy Farm	5GA113	GA.26			Ln 1		Ln 2			
0500 GA	0503		0503961	Hart Generator Station	5GA114	GA.26			Ln 1		Ln 2			
0500 GA	0503		0503985	Quarry Rd Solar Unit	5GA114	GA.26			Ln 1		Ln 2			
0500 GA	0504		0504170	Lost Mountain Rd	5GA305	CHATT. 2			Ln 18		Ln 19			
0500 GA	0504		0504302	Hwy 381	5GA306	CHATT. 3			Ln 18		Ln 19		Ln 20	[redacted]
0500 GA	0504		0504356	Shooting Range	5GA308	CHATT. 4			Ln 18		Ln 19		Ln 20	
0500 GA	0504		0504363	Pumpkin Vine Crk	5GA308	CHATT. 4			Ln 18		Ln 19		Ln 20	
0500 GA	0504		0504446	Cochran Rd	5GA310	CHATT. 4			Ln 18		Ln 19		Ln 20	
0500 GA	0504		0504500	Lucas Rd	5GA311	CHATT. 4			Ln 18		Ln 19		Ln 20	
0500 GA	0504		0504541	Brandon Farms	5GA312	CHATT. 5			Ln 18		Ln 19		Ln 20	
0500 GA	0504		0504709	Eshanlee Rd	5GA317	CHATT. 8			Ln 18		Ln 19		Ln 20	

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0500 GA	0549	[redacted]	0504053	Etowah River	5GA319	CHATT-7	[redacted]	[redacted]	Ln 19	[redacted]	Ln 19	[redacted]	15 20	[redacted]
0500 GA	0505		0505213	Merritt Chicken Farm	5GA326	CHATT-10			Ln 19		Ln 19		15 20	
0500 GA	0505		0505424	Villanow Subsigna Rd	5GA334	CHATT-11			Ln 19		Ln 19		15 20	
0500 GA	0505		0505008	County Line Rd	5GA341	CHATT-12			Ln 19		Ln 19		15 20	
0500 GA	0507		0507584	Lookout MTN Railroad	5GA350	NASH-2			Ln 19		Ln 20		15 20	
0500 GA	0573		0573127	Blackbridge Rd	5GA372	GA-8			Ln 17					
0500 GA	0573		0573579	Kimwood Rd	5GA384	BAIN-5			Ln 17					
0500 GA	0573		0573179	Richard Petty Blvd	5GA391	BAIN-7			Ln 17					
0500 GA	0513		0513023	Atlanta Gas Light	5GA399	BAIN-9			Ln 17					
0500 GA	0549		0549010	Griffin Delivery	5GA396	BAIN-9			Ln 17					
0500 GA	0513		0513131	Rehoboth Rd	5GA397	BAIN-10			Ln 17					
0500 GA	0513		0513245	Barnsville Rd	5GA400	BAIN-10			Ln 17					
0500 GA	0513		0513267	Morgan Dairy Rd	5GA405	BAIN-10			Ln 17					
0500 GA	0513		0513682	Hwy 83	5GA408	BAIN-13			Ln 17					
0500 GA	0513		0513581	Fletcher Property	5GA410	BAIN-13			Ln 17					
0500 GA	0513		0513756	Pennington Property	5GA411	BAIN-15			Ln 17					
0500 GA	0513		0513796	Powell Lines	5GA412	BAIN-15			Ln 17					
0500 GA	0513		0513826	Wadley Rd	5GA413	BAIN-15			Ln 17					
0500 GA	0513		0513877	Sanders Rd	5GA414	BAIN-15			Ln 17					
0500 GA	0549		0549010	North Macon Delivery	5GA416	BAIN-16			Ln 17					
0500 GA	0514		0514226	Tucker Rd	5GA417	BAIN-17			Ln 17					
0500 GA	0519		0519055	Newberry Farm	5GA422	BAIN-19			Ln 17					
0500 GA	0519		0519457	Chestnut Hill Rd	5GA426	BAIN-21			Ln 17					
0500 GA	0519		0519615	Dale Property	5GA431	BAIN-21			Ln 17					
0500 GA	0519		0519632	Oglethorpe	5GA440	BAIN-24			Ln 17					
0500 GA	0550		0550010	Americus Delivery (Station)	5GA451	BAIN-28			Ln 17					
0500 GA	0550		0550028	Americus Delivery Lines	5GA451	BAIN-28			Ln 0000000					

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0500 GA	0515	[redacted]	0515360	Petty Rd	5GA458	BAIN-30	[redacted]		Ln 17	[redacted]				
0500 GA	0515		0515674	S. of Kinchafoonee Creek	5GA463	BAIN-32			Ln 17					
0500 GA	0517		0517010	Albany Junction	5GA469	BAIN-33			Ln 17,17A					
0500 GA	0515		0513010	South Albany Station	5GA470	BAIN-33			Ln 17					
0500 GA	0516		0516112	Lonesome Rd	5GA472	BAIN-34			Ln 17					
0500 GA	0516		0516359	Cowbawchee Creek	5GA476	BAIN-36			Ln 17					
0500 GA	0516		0516563	North of Bainbridge	5GA482	BAIN-40			Ln 17					
0500 GA	0502		0502010	Bainbridge Station	5GA490	BAIN-41			Ln 17					
0500 GA	0505		0505010	South Macon Junction (Station)	5GA501	BAIN-10			Ln 17,17M					
0500 GA	0505		0505020	South Macon Junction (Line 17M)	5GA501	BAIN-10			Ln 17M					
0500 GA	0504		0504010	South Macon Delivery	5GA504	BAIN-17A			Ln 17					
0500 GA	0501		0501010	North Albany Station	5GA515	BAIN-23			Ln 17					
0500 GA	0512		0512279	Waitsuma Rd Rd	5GA546	BAIN-3			Ln 16					
0500 GA	0546		0546010	Chattahoochee Delivery Linen	5GA569	GA-9			Ln 14,16					
0500 GA	0546		0546020	Chattahoochee Delivery (Station)	5GA569	GA-9			Ln 14,16					
0500 GA	0547		0547010	Donalsbi Delivery	5GA604	GA-11			Ln 13,15					
0600 TN	0603		0603040	Moccasin Bend Rd	5TN002	NASH-3			Ln 19		Ln 20	[redacted]		
0600 TN	0649		0649010	Moccasin Bend Rd	5TN004	NASH-3			Ln 19		Ln 20			
0600 TN	0622		0622010	Signal Mnt Station	5TN006	NASH-3			Ln 20					
0600 TN	0603		0603178	Hwy 108 - Whitewell	5TN013	NASH-6			Ln 19		Ln 20			
0600 TN	0603		0603221	Pioneer Rd	5TN016	NASH-8			Ln 19		Ln 20			
0600 TN	0621		0621010	Coalmont Station	5TN020	NASH-8			Ln 19		Ln 20			
0600 TN	0621		0621020	Coalmont Station	5TN020	NASH-8			Ln 20					
0600 TN	0603		0603315	Freemont Rd	5TN022	NASH-8			Ln 19		Ln 20			
0600 TN	0603		0603411	Henry Cove Rd	5TN028	NASH-11			Ln 19		Ln 20			
0600 TN	0603		0603525	Dixiana Pinell Rd	5TN030	NASH-13			Ln 19		Ln 20			
0600 TN	0603		0603630	Hwy 41	5TN043	NASH-19			Ln 19		Ln 20			

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0600 TN	0623	[redacted]	0623010	Murfreesboro Station	5TN049	NASH-18	[redacted]	[redacted]	Ln 20	[redacted]		[redacted]		
0600 TN	0603	[redacted]	0603791	Almaville Rd	5TN052	NASH-20	[redacted]	[redacted]	Ln 19	[redacted]	Ln 20	[redacted]		
0600 TN	0603	[redacted]	0603890	Dell Thomas Rd	5TN054	NASH-20	[redacted]	[redacted]	Ln 19	[redacted]	Ln 20	[redacted]		
0600 TN	0630	[redacted]	0630010	Nashville Airport Delivery	5TN063	NASH-22	[redacted]	[redacted]	Ln 19	[redacted]	Ln 20	[redacted]		
0600 TN	0643	[redacted]	0643010	Easy Nashville Delivery	5TN069	NASH-24	[redacted]	[redacted]	Ln 19	[redacted]	Ln 20	[redacted]		
0600 TN	0604	[redacted]	0604220	Lavi Junction	5TN072	NASH-24	[redacted]	[redacted]	Ln 19	[redacted]		[redacted]		
0600 TN	0604	[redacted]	0604230	Exxon Junction	5TN076	NASH-24	[redacted]	[redacted]	Ln 19	[redacted]	Ln 20	[redacted]		
0600 TN	0642	[redacted]	0642010	Nashville Delivery	5TN077	NASH-24	[redacted]	[redacted]	Ln 19	[redacted]		[redacted]		
0600 TN	0640	[redacted]	0640010	Chattanooga Delivery 1	5TN405	KNOX-2	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0640	[redacted]	0640020	Chattanooga Delivery 2	5TN406	KNOX-2	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0602	[redacted]	0602067	Troubadour Dr	5TN408	KNOX-3	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0602	[redacted]	0602138	Boyman Creek Rd	5TN412	KNOX-4	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0602	[redacted]	0602207	Timber Trace Circle	5TN415	KNOX-5	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0624	[redacted]	0624010	Charleston Station	5TN420	KNOX-7	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0621	[redacted]	0620010	Nicks Stuck Viv	5TN429	KNOX-10	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0602	[redacted]	0602575	Moses Rd	5TN433	KNOX-11	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0625	[redacted]	0625010	Sweetwater Station	5TN437	KNOX-13	[redacted]	[redacted]	Ln 18/25	[redacted]		[redacted]		
0600 TN	0602	[redacted]	0602703	Commerce Park	5TN440	KNOX-13	[redacted]	[redacted]	Ln 18/25	[redacted]		[redacted]		
0600 TN	0602	[redacted]	0602751	Sugarwood Rd	5TN442	KNOX-15	[redacted]	[redacted]	Ln 18/25	[redacted]		[redacted]		
0600 TN	0602	[redacted]	0602958	Mars Hill Rd	5TN452	KNOX-18	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0641	[redacted]	0641010	Knoxville Delivery	5TN454	KNOX-19	[redacted]	[redacted]	Ln 18	[redacted]		[redacted]		
0600 TN	0605	[redacted]	0644010	Knoxville East Delivery	5TN458	KNOX-19	[redacted]	[redacted]	Ln 18/20	[redacted]		[redacted]		
0700 SC	0701	[redacted]	0701051	Opry House Rd.	5SC002	GA-26	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701114	Generosity Church Rd.	5SC002	GA-26	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701167	Ramey Rd / Hwy 412	5SC003	SC-2	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		

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0700 SC	0701	[redacted]	0701266	[redacted] Hwy 104	55C005	SC-3	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701344	Stevenson Rd	55C006	SC-3	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0720	[redacted]	0720010	Andanson Station	55C006	SC-3	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701410	Boulknight Farm/Honeywell Crossing (Toilet)	55C006	SC-3	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701478	Kays Strat	55C007	SC-3	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701479	Kays Street Affex	55C007	SC-3	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701508	Airline Ave	55C008	SC-3	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701562	Acker Rd (AF)	55C008	SC-4	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701612	Co Rd 247 (Broadway Lake Rd (AF)	55C008	SC-4	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701656	Prince De Leon Dr (AF)	55C009	SC-4	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701724	Amity Rd (AF)	55C010	SC-4	[redacted]		Ln 1	[redacted]	Ln 3	[redacted]		
0700 SC	0701	[redacted]	0701775	Co Rd 118 (N. Major Rd)	55C011	SC-5	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701779	North Major Rd (AF)	55C011	SC-5	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701847	Lamar Mitchell Rd	55C012	SC-5	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701864	Co Rd 259 (Roger Bolt Rd)	55C012	SC-5	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701869	Griffin Rd	55C012	SC-5	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701902	Kay Street	55C012	SC-5	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0701	[redacted]	0701944	West Calhoun Rd (Co Rd 205)	55C013	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0721	[redacted]	0721010	Belton Jct 10 South (Tank #510 #2)	55C013	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0721	[redacted]	0721020	Belton #20 North near TK 570	55C013	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0721	[redacted]	0721030	Belton #30 Center near TK 510	55C013	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0721	[redacted]	0721040	Belton Jct 40	55C013	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0721	[redacted]	0721050	Belton Jct 50	55C013	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0721	[redacted]	0721060	Belton Jct 60	55C013	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702019	Murphy Road	55C014	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702040	Reactor Road	55C014	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702069	Cannon Bottom Rd#119	55C015	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc. Code	Site Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0700 SC	0702	[redacted]	0702170	Copley Bridge Road	55C017	SC-6	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702		0702203	Hopkins Road	55C018	SC-6			Ln 1		Ln 2			
0700 SC	0702		0702226	Holly Drive	55C019	SC-8			Ln 1		Ln 2			
0700 SC	0702		0702255	Station Shoals Road	55C019	SC-8			Ln 1		Ln 2			
0700 SC	0702		0702279	Fork Shoals Road	55C020	SC-8			Ln 1		Ln 2			
0700 SC	0702		0702309	South Harrison Bridge Road	55C020	SC-8			Ln 1		Ln 2			
0700 SC	0702		0702338	Ridgeway Drive	55C021	SC-8			Ln 1		Ln 2			
0700 SC	0702		0702358	New Harrison Bridge Road	55C022	SC-8			Ln 1		Ln 2			
0700 SC	0702		0702368	Newly's Ferry Road	55C022	SC-8			Ln 1		Ln 2			
0700 SC	0702		0702381	Fairview Road	55C022	SC-8			Ln 1		Ln 2			
0700 SC	0723		0723010	Simpsonville Station	55C023	SC-9			Ln 1		Ln 2			
0700 SC	0702		0702447	Speedway Drive	55C023	SC-9			Ln 1		Ln 2			
0700 SC	0702		0702464	Scuffletown Road	55C024	SC-9			Ln 1		Ln 2			
0700 SC	0702		0702532	Hymen Road	55C025	SC-9			Ln 1		Ln 2			
0700 SC	0702		0702554	Hunter Road	55C026	SC-10			Ln 1		Ln 2			
0700 SC	0702		0702568	Cooper Bridge Road - Laurens	55C026	SC-10			Ln 1		Ln 2			
0700 SC	0702		0702589	Cooper Bridge Road - Spartanburg	55C026	SC-10			Ln 1		Ln 2			
0700 SC	0702		0702612	Bellview Road	55C027	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702647	Crescent Green Point Road	55C028	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702648	Crescent Green Point Road	55C028	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702650	Crescent Green Point Road - Alf	55C028	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702677	Ferguson Road	55C029	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702713	Rogers Road	55C029	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702714	Rogers Road - Alf	55C029	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702743	Bobcat Road	55C030	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702791	State Highway 290 (Old Spartanburg Road)	55C031	SC-11			Ln 1		Ln 2			
0700 SC	0702		0702779	Old Spartanburg Road (S/S Hwy 290)	55C031	SC-12			Ln 1		Ln 2			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Mile Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0700 SC	0702	[redacted]	0702829	Interstate 26	55C032	SC-12	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702840	Bullman Road	55C032	SC-12	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702896	Bowden Road	55C032	SC-13	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702891	Bowden Road - AF	55C032	SC-13	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702858	Stella Drive	55C033	SC-12	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702894	Stone Station Hwy 215	55C033	SC-12	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702875	McAbee Road	55C033	SC-12	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702921	Cannon Road	55C034	SC-13	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702932	Blanchard Road - AF	55C034	SC-13	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702939	Blanchard Road	55C034	SC-13	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702952	Baptist Church Camp Road	55C035	SC-13	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0702	[redacted]	0702996	Saratoga Avenue	55C036	SC-13	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0741	[redacted]	0741019	Spartanburg Station - Manifold Area	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0741	[redacted]	0741026	Spartanburg Station - Tanks 650, 651, 652, 660, 661, 662 & 670	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0741	[redacted]	0741036	Spartanburg Station - Tanks 610, 611, 612, 613, 614, 615 & 619	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0741	[redacted]	0741046	Spartanburg Station - Tanks 630, 633, 634 & 639	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0741	[redacted]	0741056	Spartanburg Station - Tanks 632, 633, 634 & 639	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0741	[redacted]	0741066	Spartanburg Station - Manifold Area	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703	[redacted]	0703026	300 Dogwood Club Road	55C037	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703	[redacted]	0703054	461 Dogwood Club Road	55C037	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703	[redacted]	0703085	Sutton Road	55C037	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703	[redacted]	0703112	Emma Cudd Road	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703	[redacted]	0703147	Dobbinsville Road AF	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703	[redacted]	0703148	Dobbinsville Road - Hwy 108	55C038	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703	[redacted]	0703194	Hammett Road	55C039	SC-14	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703	[redacted]	0703246	Soapstone Road	55C040	SC-15	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Mile Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0700 SC	0703	[redacted]	0703247	Soapstone Road Alt	55CD40	SC-35	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0700 SC	0703		0703262	Goucher School Road	55CD41	SC-35			Ln 1		Ln 2			
0700 SC	0703		0703263	Goucher School Road Alt	55CD41	SC-35			Ln 1		Ln 2			
0700 SC	0703		0703322	Double Bridge Road - solar unit	55CD42	SC-36			Ln 1		Ln 2			
0700 SC	0722		0722010	Gaffney Station	55CD43	SC-36			Ln 1		Ln 2			
0700 SC	0703		0703371	Old Race Track Road - Gaffney	55CD43	SC-36			Ln 1		Ln 2			
0700 SC	0703		0703436	Whitesburg Road	55CD44	SC-36			Ln 1		Ln 2			
0700 SC	0703		0703466	Union Highway - Hwy. 18	55CD44	SC-36			Ln 1		Ln 2			
0700 SC	0703		0703505	Vestee Road	55CD45	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703525	Frye Road	55CD45	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703581	Goldmine Road - Gaffney	55CD47	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703596	Ford Road - Hwy. 329	55CD47	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703597	Ford Road - Hwy. 329	55CD47	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703615	River Road - East Side Broad River	55CD47	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703637	South of Bolton Parker Road on R/W	55CD48	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703668	Lawgan Road U/S	55CD49	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703669	Lawgan Road D/S	55CD49	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703706	South Charleston Street Extension - Linear	55CD49	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703708	South Charleston Street Extension	55CD49	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703723	Rutherford Road	55CD49	SC-37			Ln 1		Ln 2			
0700 SC	0703		0703739	Dye Road	55CD49	SC-38			Ln 1		Ln 2			
0700 SC	0703		0703780	Cherokee Hills Road	55CD50	SC-38			Ln 1		Ln 2			
0700 SC	0703		0703806	Jumping Branch Road	55CD51	SC-39			Ln 1		Ln 2			
0700 SC	0703		0703838	Possum Trot Road	55CD51	SC-39			Ln 1		Ln 2			
0700 SC	0703		0703879	Claytonia Road	55CD52	SC-39			Ln 1		Ln 2			
0700 SC	0703		0703901	Rockhouse Road	55CD52	SC-39			Ln 1		Ln 2			
0700 SC	0703		0703931	Battleground Road - Hwy. 216	55CD53	SC-39			Ln 1		Ln 2			

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State	Loc Code	Mile Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0700 SC	0704	[redacted]	0704002	State Hwy 33 (Lindsey Cemetery Rd)	55C308	AUG-3	[redacted]	[redacted]	Ln 21	[redacted]	Ln 29	[redacted]		
0700 SC	0704		0704019	Rec @ Hwy 378 McCormick Co	55C324	AUG-8			Ln 21		Ln 29			
0700 SC	0704		0704053	State Hwy 53 (Driggs Rd)	55C327	AUG-12			Ln 21		Ln 29			
0700 SC	0703		0703025	Belvedere Junction	55C340	AUG-13			Ln 21		Ln 29			
0700 SC	0700		0700402	South Fork Road - Epenhardung Driveway	55C002	SC-13			Ln 1		Ln 2			
0600 NC	0601		0601015	Bethlehem Road AF	5NC001	NC-26			Ln 1		Ln 2			
0600 NC	0601		0601015	Bethlehem Road	5NC001	NC-30			Ln 1		Ln 2			
0600 NC	0601		0601066	State Highway 161	5NC002	NC-26			Ln 1		Ln 2			
0600 NC	0601		0601114	Unity Church Road	5NC003	NC-26			Ln 1		Ln 2			
0600 NC	0601		0601224	Freedom Mill Road	5NC004	NC-26			Ln 1		Ln 2			
0600 NC	0601		0601298	Crowder's Creek Road	5NC005	NC-2			Ln 1		Ln 2			
0600 NC	0601		0601356	Little Mountain Road	5NC006	NC-2			Ln 1		Ln 2			
0600 NC	0601		0601393	White Pond Road - Across from Gayle Avenue - west of Cardonia Station driveway	5NC007	NC-2			Ln 1		Ln 2			
0600 NC	0601		0622010	Gardonia Site	5NC007	NC-2			Ln 1		Ln 2			
0600 NC	0601		0601454	Brentwood Road	5NC007	NC-2			Ln 1		Ln 2			
0600 NC	0601		0601470	Pine Creek Road	5NC008	NC-2			Ln 1		Ln 2			
0600 NC	0601		0601570	Lowell Bethesda Road - Highway 2430	5NC009	NC-3			Ln 1		Ln 2			
0600 NC	0601		0601656	Dan Maple's Drive	5NC009	NC-3			Ln 1		Ln 2			
0600 NC	0601		0601657	Mayflower Street	5NC011	NC-3			Ln 1		Ln 2			
0600 NC	0601		0601658	Cramerton Village Drive	5NC012	NC-3			Ln 1		Ln 2			
0600 NC	0601		0601679	Lake Wood Road	5NC012	NC-3			Ln 1		Ln 2			
0600 NC	0601		0601854	Caldwell Rd	5NC014	NC-4			Ln 1		Ln 2			
0600 NC	0601		0601860	Moore's Chapel Rd (Johnson Property off Moore's Chapel)	5NC016	NC-5			Ln 1		Ln 2			
0600 NC	0601		0601901	I-485 - Wilkins Rd	5NC016	NC-5			Ln 1		Ln 2			
0600 NC	0601		0601936	Sullins Road	5NC017	NC-5			Ln 1		Ln 2			
0600 NC	0601		0601997	Kennbaid Circle	5NC018	NC-5			Ln 1		Ln 2			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire Pool	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0600 NC	0640	[redacted]	0640010	Charlotte Station Tanks 701 AND 770	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640020	Charlotte Station Tanks 731-34, 710, ETC.	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640030	Charlotte Station Manifold	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640040	Charlotte Station Tanks 730, 735-737	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640050	Charlotte Station Tank Lines	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640060	Charlotte Station Tanks 711, 712 AND 717	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640070	Charlotte Station Tanks 750, 751 AND 765	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640080	Charlotte Station Tanks 731 AND 732	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640090	Charlotte Station Tanks 730 AND 731	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640100	Charlotte Station Tank 762	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640110	Charlotte Station Tank 730	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640120	Charlotte Station Tank 761	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0640	[redacted]	0640130	Charlotte Station Tank 770	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602014	Old Plank Road	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602027	Pleasant Grove Road	SNC019	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602043	Sunset Drive	SNC020	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602049	Miranda Rd	SNC021	NC-5	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602060	Alexanderana Road	SNC022	NC-6	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602108	Hambright Rd	SNC023	NC-7	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602114	State Highway 115	SNC023	NC-7	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602177	McCauly Road	SNC025	NC-7	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602182	Kiser Corner Lane	SNC026	NC-7	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602211	Shiloh Church Rd	SNC027	NC-7	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602219	Kannapolis Station	SNC028	NC-8	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602247	Plum Road	SNC028	NC-9	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602248	Fox Ridge Road	SNC028	NC-9	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602	[redacted]	0602270	Wright Road	SNC029	NC-9	[redacted]	[redacted]	Ln 1	[redacted]	Ln 2	[redacted]		

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Mile Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0600 NC	0602	[redacted]	0602275	Freeze Rd	SNC030	NC-9	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602		0602300	Campbell Road	SNC031	NC-9			Ln 1		Ln 2			
0600 NC	0602		0602301	Campbell Road Linear (End of Campbell Rd.)	SNC031	NC-9			Ln 1		Ln 2			
0600 NC	0602		0602322	Hwy 102	SNC032	NC-9			Ln 1		Ln 2			
0600 NC	0602		0602338	Millbridge Road	SNC032	NC-9			Ln 1		Ln 2			
0600 NC	0602		0602364	Rectifier Prop. (off Lipe Rd behind house by Turkey barns)	SNC033	NC-10			Ln 1		Ln 2			
0600 NC	0602		0602368	Weaver Road	SNC033	NC-10			Ln 1		Ln 2			
0600 NC	0602		0602376	Cooper Road - Trailer Park at End	SNC034	NC-10			Ln 1		Ln 2			
0600 NC	0602		0602421	Castile Farm Road (West of Salisbury - Hwy 150)	SNC036	NC-11			Ln 1		Ln 2			
0600 NC	0602		0602436	Sheriff's Ford Rd	SNC036	NC-11			Ln 1		Ln 2			
0600 NC	0602		0602451	Majestic Rd	SNC037	NC-11			Ln 1		Ln 2			
0600 NC	0602		0602461	Hwy 601 - Private Drive off road	SNC038	NC-11			Ln 1		Ln 2			
0600 NC	0602		0602488	Wiley Farm Rd	SNC038	NC-12			Ln 1		Ln 2			
0600 NC	0602		0602509	Sells Rd	SNC039	NC-12			Ln 1		Ln 2			
0600 NC	0602		0602515	Old Mocksville Road - Hwy 1910	SNC040	NC-12			Ln 1		Ln 2			
0600 NC	0602		0602521	Hannah Ferry Road	SNC040	NC-12			Ln 1		Ln 2			
0600 NC	0602		0602534	North of Yadkin River Anodebox	SNC040	NC-12			Ln 1		Ln 2			
0600 NC	0602		0602538	Farrell Farm - off Hannah Ferry Road	SNC040	NC-12			Ln 1		Ln 2			
0600 NC	0602		0602548	Simerson Road	SNC041	NC-12			Ln 1		Ln 2			
0600 NC	0602		0602555	Sowers Road	SNC041	NC-13			Ln 1		Ln 2			
0600 NC	0602		0602563	Clement Road	SNC041	NC-13			Ln 1		Ln 2			
0600 NC	0602		0602579	Wilson Road	SNC042	NC-13			Ln 1		Ln 2			
0600 NC	0602		0602597	Swearingen Road	SNC042	NC-14			Ln 1		Ln 2			
0600 NC	0602		0602621	Hoyle Grubbs Lane - Hwy 1213 off Tyro Road	SNC044	NC-14			Ln 1		Ln 2			
0600 NC	0602		0623610	Lexington Station	SNC044	NC-14			Ln 1		Ln 2			
0600 NC	0602		0602630	Helmstetter Road - Hwy 1208	SNC044	NC-14			Ln 1		Ln 2			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Mile Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0600 NC	0602	[redacted]	0602053	[redacted] Old Hwy 64)	SNC045	NC-14	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0602		0602056	Pittsoe Road (1/4 Mile off Old Hwy 64)	SNC046	NC-14			Ln 1		Ln 2			
0600 NC	0602		0602075	Happy Hill Road - D/S US Highway 64	SNC046	NC-14			Ln 1		Ln 2			
0600 NC	0602		0602710	Arnold Road	SNC048	NC-14			Ln 1		Ln 2			
0600 NC	0602		0602751	Bud Sink Road	SNC049	NC-16			Ln 1		Ln 2			
0600 NC	0602		0602787	Clodfelter Rd	SNC051	NC-16			Ln 1		Ln 2			
0600 NC	0602		0602788	Hoy Long Road - off Clodfelter	SNC051	NC-16			Ln 1		Ln 2			
0600 NC	0602		0602828	Friendship Ledford Road	SNC053	NC-16			Ln 1		Ln 2			
0600 NC	0602		0602858	Plantation Place	SNC054	NC-17			Ln 1		Ln 2			
0600 NC	0602		0602885	Wallburg High Point Road - off Horny Town Road - Hwy 1781	SNC055	NC-17			Ln 1		Ln 2			
0600 NC	0602		0602919	Impala Ave. & Imperial Drive	SNC056	NC-18			Ln 1		Ln 2			
0600 NC	0602		0602929	Johnson Street - Hwy. 1818	SNC057	NC-18			Ln 1		Ln 2			
0600 NC	0602		0602965	Willard Dairy Road	SNC058	SLD-1			Ln 1		Ln 2			
0600 NC	0602		0602998	Greensboro Station (Southern Side)	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621010	Greensboro Station Tanks 822, 823, 824, 918, 919 & 821	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621020	Greensboro Station Tanks 834, 835, 836 & 837	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621030	Greensboro Station Drain Down Tanks	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621040	Greensboro Station Tanks 858, 860, 870 & 877	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621050	Greensboro Station Tanks 852, 862 & 875	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621060	Greensboro Station (South Lab)	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621070	Greensboro Station (North Old Lab)	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621080	Greensboro Station Tanks 863, 864 & 880	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621090	Greensboro Station Tanks 856, 861, 862 & 863	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621100	Greensboro Station Tanks 850, 851, 873 & 874	SNC060	SLD-1			Ln 1		Ln 2			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire Pair	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0600 NC	0621	[redacted]	0621110	Greensboro Station Tank 872	SNC060	SLD-1	[redacted]		Ln 1	[redacted]	Ln 2	[redacted]		
0600 NC	0621		0621120	Greensboro Station Tank 873	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621130	Greensboro Station Tank 863	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621140	Greensboro Station Tanks 876 & 853	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621150	Greensboro Station Tanks 878 & 879	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621160	Greensboro Station Tanks 816, 816 & 817	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621170	Greensboro Station Tank 815	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621180	Greensboro Station Tanks 811, 812, 813, 814, 867 & 868	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621190	Greensboro Station Tank 820	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621200	Greensboro Station Tank 825, 845, 843, 844 AND 842	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621210	Greensboro Station Tanks 836, 839, 841 AND 842	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621220	Greensboro Station Tanks 830, 831, 832 AND 833	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621230	Greensboro Station Tank 826	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621240	Greensboro Station Tanks 850 & 853	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621250	Greensboro Station Tank 857	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621260	Greensboro Station Tank 880	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0621		0621270	Greensboro Station Tank 821	SNC060	SLD-1			Ln 1		Ln 2			
0600 NC	0603		0603010	Greensboro Remote Manifold - Deepwell Rectifier	SNC061	SLD-1			Ln 3		Ln 4			
0600 NC	0603		0603010	Greensboro Delivery Lines (Behind Triad Terminal)	SNC061	SLD-1			Ln 3		Ln 4			
0600 NC	0603		0603020	Old Oak Ridge Road	SNC062	SLD-1			Ln 3		Ln 4			
0600 NC	0603		0603130	Fleming Road	SNC063	SLD-1			Ln 3		Ln 4			
0600 NC	0603		0603140	Horsepen Creek Road State Highway 2182	SNC063	NC-20			Ln 3		Ln 4			
0600 NC	0603		0603160	Camden Falls Circle	SNC064	NC-21			Ln 3		Ln 4			
0600 NC	0603		0603161	Camden Falls Circle - Lower	SNC064	NC-21			Ln 3		Ln 4			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Mile Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0600 NC	0603	[redacted]	0603210	Candewara Road	SNC064	NC-21	[redacted]		Ln 3	[redacted]	Ln 4	[redacted]		
0600 NC	0603	[redacted]	0603243	Lake Brandt Road	SNC065	NC-21			Ln 3		Ln 4			
0600 NC	0603		0603279	Plainfield Road - State Highway 2324	SNC066	NC-21			Ln 3		Ln 4			
0600 NC	0603		0603288	Plainfield Road - Anodeflex	SNC068	NC-21			Ln 3		Ln 4			
0600 NC	0603		0603340	Cicero Road - Anodeflex	SNC067	NC-21			Ln 3		Ln 4			
0600 NC	0603		0603408	Church Street - State Route 1001	SNC068	NC-22			Ln 3		Ln 4			
0600 NC	0603		0603432	O'Bryant Road - Anodeflex	SNC069	NC-22			Ln 3		Ln 4			
0600 NC	0603		0603459	State Highway 158 - Anodeflex	SNC069	NC-22			Ln 3		Ln 4			
0600 NC	0603		0603488	Kuger Road	SNC070	NC-22			Ln 3		Ln 4			
0600 NC	0603		0603541	Miller Chapel Road - Anodeflex	SNC071	NC-23			Ln 3		Ln 4			
0600 NC	0603		0603547	Boyd Road - State Highway 2409	SNC071	NC-23			Ln 3		Ln 4			
0600 NC	0603		0603559	Dapple Road - Anodeflex	SNC072	NC-23			Ln 3		Ln 4			
0600 NC	0603		0603631	Highway 65 & 87 - Anodeflex	SNC073	NC-23			Ln 3		Ln 4			
0600 NC	0603		0603610	Reidsville Station	SNC073	NC-23			Ln 3		Ln 4			
0600 NC	0603		0603647	Reidsville Station Remote Bed	SNC073	NC-23			Ln 3		Ln 4			
0600 NC	0603		0603694	Highway 14	SNC074	NC-24			Ln 3		Ln 4			
0600 NC	0603		0603737	Carl Lane - Highway 1962 - Anodeflex	SNC075	NC-24			Ln 3		Ln 4			
0600 NC	0603		0603763	Crutchfield Road - State Highway 1943	SNC076	NC-24			Ln 3		Ln 4			
0600 NC	0603		0603794	Oregon Hills Road - Anodeflex	SNC076	NC-24			Ln 3		Ln 4			
0600 NC	0603		0603810	Wrenham Mill Road - Anodeflex	SNC077	NC-24			Ln 3		Ln 4			
0600 NC	0603		0603865	Bailey Farm Road - State Highway 1931 - Anodeflex	SNC078	NC-25			Ln 3		Ln 4			
0600 NC	0603		0603879	Guernsey Springs Road	SNC078	NC-25			Ln 3		Ln 4			
0600 NC	0603		0603891	Dickerson Road - State Highway 1910	SNC078	NC-25			Ln 3		Ln 4			
0600 NC	0603		0603894	Dickerson Road - Shuma Farm - Anodeflex	SNC078	NC-25			Ln 3		Ln 4			
0600 NC	0603		0603926	State Highway 1908 - Lillard Road - Anodeflex	SNC079	NC-26			Ln 3		Ln 4			

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0600 NC	0603	[redacted]	0603053	Cotton Pond Road 91 - NC Highway 1707	SNC059	NC-26	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		
0600 NC	0603	[redacted]	0603058	Goose Pond Road #2 - NC Highway 1707	SNC060	NC-26	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0600 NC	0603	[redacted]	0603061	State Highway 1758 - Gravel Hill Road - Ansdellies	SNC060	NC-26	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0600 NC	0606	[redacted]	0600003	Greensboro Station	SNC301	SLD-1	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600040	Gardner Lane	SNC302	SLD-1	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600061	MacKay Road	SNC303	SLD-1	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600101	Grand Over Parkway	SNC305	SLD-3	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600124	Evandown Road	SNC305	SLD-3	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600170	South Elm Eugene Street	SNC307	SLD-3	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600240	Hagan Stone Park Road	SNC308	SLD-4	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600299	Old Julian Road Linear	SNC311	SLD-4	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600300	Old Julian Road	SNC311	SLD-4	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600371	Kimesville Road	SNC314	SLD-5	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0624010	Liberty Station	SNC316	SLD-7	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600557	Old Switchboard Road	SNC321	SLD-8	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600564	Green Hill Road	SNC321	SLD-8	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600596	Pete Thomas Road	SNC322	SLD-8	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600637	Chicken Bridge Road - State Highway 1546	SNC324	SLD-8	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600714	Moore Mountain Road	SNC327	SLD-9	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600843	Holland Chapel Road	SNC331	SLD-11	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0606	[redacted]	0600861	Jenks Road - State Highway 1601	SNC334	SLD-11	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0641	[redacted]	0641010	Apex Station	SNC337	SLD-13	[redacted]	[redacted]	Ln 22	[redacted]	Ln 23	[redacted]	Ln 24	[redacted]
0600 NC	0607	[redacted]	0607310	Old Stage Road	SNC342	SLD-14	[redacted]	[redacted]	Ln 22	[redacted]	Ln 235	[redacted]	Ln 245	[redacted]
0600 NC	0607	[redacted]	0607567	Cornwallis Road - State Highway 1536	SNC347	SLD-16	[redacted]	[redacted]	Ln 22	[redacted]	Ln 235	[redacted]	Ln 245	[redacted]

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Mile Post	Rectifier Id	Location	Alig Sh #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0800 NC	0607	[redacted]	0607772	Bunk Cole Road	SNC359	SLD-17	[redacted]	[redacted]	Ln 22	[redacted]	Ln 239	[redacted]	Ln 245	[redacted]
0800 NC	0607	[redacted]	0607907	Lee Youngblood	SNC362	SLD-18	[redacted]	[redacted]	Ln 22	[redacted]	Ln 239	[redacted]	Ln 245	[redacted]
0800 NC	0607	[redacted]	0644610	Selma Station	SNC354	SLD-18	[redacted]	[redacted]	Ln 22	[redacted]	Ln 239	[redacted]	Ln 245	[redacted]
0800 NC	0607	[redacted]	0663510	Selma Delivery	SNC354	SLD-18	[redacted]	[redacted]	Ln 22	[redacted]	Ln 239	[redacted]	Ln 245	[redacted]
0800 NC	0609	[redacted]	0600361	West Chatham Street	SNC364	RD-2	[redacted]	[redacted]	Ln 23RDU	[redacted]		[redacted]		[redacted]
0800 NC	0609	[redacted]	0643610	Raleigh Durham Station	SNC371	RD-2	[redacted]	[redacted]	Ln 23RDU	[redacted]		[redacted]		[redacted]
0800 NC	0608	[redacted]	0608123	Grippity Avenue (State Highway 1395)	SNC383	SLD-13	[redacted]	[redacted]	Ln 24F	[redacted]		[redacted]		[redacted]
0800 NC	0608	[redacted]	0608347	Rawls Church Road	SNC387	FVD-3	[redacted]	[redacted]	Ln 24F	[redacted]		[redacted]		[redacted]
0800 NC	0608	[redacted]	0608414	Christian Light Road	SNC389	FVD-3	[redacted]	[redacted]	Ln 24F	[redacted]		[redacted]		[redacted]
0800 NC	0608	[redacted]	0608503	Lillington Station - Line Rectifier	SNC391	FVD-3	[redacted]	[redacted]	Ln 24F	[redacted]		[redacted]		[redacted]
0800 NC	0608	[redacted]	0608662	Johnson Farm Road	SNC398	FVD-6	[redacted]	[redacted]	Ln 24F	[redacted]		[redacted]		[redacted]
0800 NC	0643	[redacted]	0643610	Fayetteville Station	SNC402	FVD-7	[redacted]	[redacted]	Ln 24F	[redacted]		[redacted]		[redacted]
0900 VA	0001	[redacted]	0001011	Hylar Farm	SVA001	NC-26	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001012	Hylar Farm	SVA001	NC-26	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001033	Vandola Road / SR 670	SVA002	NC-26	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001051	US Hwy 58	SVA003	VA-2	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001072	S. Jamerson Rd / SR 1523	SVA004	VA-2	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001093	Orphanage Rd / SR 743	SVA005	VA-3	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001119	Mt. View / SR 745	SVA007	VA-3	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001121	Witt Station - Lineup	SVA007	VA-3	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0002	[redacted]	0020010	Witt Station	SVA007	VA-3	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001142	US Hwy 29	SVA008	VA-4	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001156	Chestnut Level Rd / SR 621	SVA009	VA-4	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001172	Oakes Farm AF	SVA010	VA-4	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001188	Dodson Rd / SR 662	SVA011	VA-5	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001198	Mac Rd / SR 707	SVA011	VA-5	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]
0900 VA	0001	[redacted]	0001198	Mac Rd / SR 707	SVA011	VA-5	[redacted]	[redacted]	Ln 3	[redacted]	Ln 4	[redacted]		[redacted]

Colonial Pipeline Company

RECTIFIER LOCATIONS

State	Loc Code	Wire Feet	Rectifier Id	Location	Alig Sn #	Quad Map	Latitude	Longitude	Line #	Sta. #	Line #	Sta. #	Line #	Sta. #
0000 VA	0001	[redacted]	0001214	Abbott Rd / SR 708	SVAD12	VA.5	[redacted]		Ln 3	[redacted]	Ln 4	[redacted]		
0000 VA	0001		0001223	Statesville Rd / SR 701	SVAD13	VA.5			Ln 3		Ln 4			
0000 VA	0001		0001240	State Hwy 57	SVAD14	VA.6			Ln 3		Ln 4			
0000 VA	0001		0001258	Red Rd / SR 729	SVAD15	VA.6			Ln 3		Ln 4			
0000 VA	0001		0001261	Red Rd / SR 729	SVAD15	VA.6			Ln 3		Ln 4			
0000 VA	0001		0001267	Elkhorn Rd / SR 666	SVAD15	VA.6			Ln 3		Ln 4			
0000 VA	0001		0001283	Yeatts Store Rd / SR 668	SVAD16	VA.6			Ln 3		Ln 4			
0000 VA	0001		0001297	Church Rd / SR 680	SVAD17	VA.7			Ln 3		Ln 4			
0000 VA	0001		0001310	McDaniel Rd / SR 722	SVAD17	VA.7			Ln 3		Ln 4			
0000 VA	0001		0001344	Hickory Grove Station - Remote	SVAD19	VA.8			Ln 3		Ln 4			
0000 VA	0001		0001345	Hickory Grove Station - Linear	SVAD19	VA.8			Ln 3		Ln 4			
0000 VA	0001		0027010	Hickory Grove Station	SVAD19	VA.8			Ln 3		Ln 4			
0000 VA	0001		0001356	Old Concord Rd / SR 649	SVAD20	VA.8			Ln 3		Ln 4			
0000 VA	0001		0001367	Cody Road / SR 603	SVAD20	VA.8			Ln 3		Ln 4			
0000 VA	0001		0001381	Alex Ln / SR 799	SVAD21	VA.8			Ln 3		Ln 4			
0000 VA	0001		0001394	Tobacco Rd / SR 647	SVAD22	VA.8			Ln 3		Ln 4			
0000 VA	0001		0001404	Thornton Rd / SR 638	SVAD23	VA.8			Ln 3		Ln 4			
0000 VA	0001		0001412	State Highway 40	SVAD23	VA.9			Ln 3		Ln 4			
0000 VA	0001		0001420	Bull Creek Rd / SR 636	SVAD23	VA.9			Ln 3		Ln 4			
0000 VA	0001		0001432	River Valleys	SVAD24	VA.10			Ln 3		Ln 4			
0000 VA	0001		0001450	Indian Jerr Trail / SR 341	SVAD24	VA.10			Ln 3		Ln 4			

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

(Virginia, North Carolina, South Carolina, Tennessee, Georgia, Alabama)

This section provides an overview of environmentally sensitive ecological and human use areas across Colonial Pipeline's Southeast District including the States of Virginia, North Carolina, South Carolina, Tennessee, Georgia, and Alabama, respectively. These areas include, but are not limited to, rivers, streams, creeks, wetlands, terrestrial features, historical sites, and state and federal recreational areas. These areas may also contain critical habitats and the potential to harbor threatened and endangered plant and animal species as well as migratory waterfowl. The identification of environmentally sensitive areas is important in that emergency response containment, recovery, and remediation activities can be prioritized to limit potential impacts to these areas.

The environmentally sensitive areas (ESA's) along the pipeline corridor within the Southeast District were identified through a review of Google Earth, Google Map, and US Fish and Wildlife Service's Information for Planning and Conservation [IPaC by USFWS]. For inland areas of the pipeline (located between the major river crossings), environmentally sensitive areas were identified within approximately one mile in each direction of the pipeline. For areas where the pipeline crosses major rivers, environmentally sensitive areas were identified for a distance of approximately 75 miles downgradient of the pipeline crossings. However, if a significant surface water feature (e.g., lake, reservoir) was identified prior to reaching the 75 mile downgradient point, and the projected flow rate was expected to allow emergency response and recovery operations to efficiently manage the potential for downgradient exposures, the area included for the environmental sensitive area identification was adjusted accordingly. During an actual event, the site specific conditions of weather, flow, volume released, etc. will be used to refine or expand the assessment of environmentally sensitive areas that potentially can be exposed to spilled product.

This section provides:

Protection Prioritization Considerations: An overview of the emergency response prioritization strategies developed to protect environmentally sensitive areas;
Internal Information Management System: An overview of Colonial's internal information management system developed to support the access and mapping of environmentally sensitive areas; and
Environmentally Sensitive Areas: A listing of environmentally sensitive areas across Colonial Pipeline's Southeast District including the States of Virginia, North Carolina, South Carolina, Tennessee, Georgia, and Alabama.
Each of these topics are discussed, in turn, in the following sections.

PROTECTION PRIORITIZATION CONSIDERATIONS

The protection strategies outlined in this emergency response plan (Section 9.02 of this plan) will be employed to limit potential impacts to environmentally sensitive areas. Resource constraints, time constraints, and various response constraints can influence the areas that can be protected during a major oil spill. As such, environmentally sensitive areas are a priority for protection and include the following:

1. Public Health.
   (a) Storm drain outlets.
   (b) Public drinking water intakes.

   (c) Public utility water intakes.
2. Threatened and Endangered Species.
3. Habitat and Species Concentrations.
   (a) Designated natural areas, wildlife refuges and game management areas.
   (b) Wildlife concentrations (which may vary seasonally).
   (c) Vegetated wetlands and shoreline.
   (d) Commercial and recreational fisheries management areas.
4. Other Public Lands including Local, State, and National Parks.
5. Cultural and Historical Sites.
6. Private Recreational Areas and Facilities.
7. Marinas.
8. Private and Industrial Raw Water Supplies

INTERNAL INFORMATION ACCESS AND MANAGEMENT SYSTEM

Colonial has identified major resources at risk along their pipeline routes as well as potential recovery sites. In addition to the information provided in this plan, other environmentally sensitive area information is stored and accessible in Colonial's Response "Map books" and Colonial's GIS-based Pipeline Explorer. Each of these systems may be accessed as described below.

Pipeline Explorer may be accessed by clicking the link on Colonial's Homepage under Applications>Tech Services>Colonial GIS Online, or going directly to http://sp-gisweb/PE/ while logged on to Colonial's intranet.

Pipeline Explorer is a GIS based program that allows the user to view areas of concern, specifically environmentally sensitive areas, along the pipeline system.

Colonial Pipeline utilizes USGS 7.5 minute (1:50,000 – scale) quadrangle sheets bound into a "Map book" from which recovery sites and resources at risk can be identified. For example, these maps include USGS information on roads, State Parks, Federal Lands (i.e., Forests, National Parks, etc.), populated areas, water bodies, and wetlands.

Colonial has superimposed on these maps pertinent information that includes pre-located product recovery/monitoring sites along all potentially impacted waterways, equipment recommendations for each recovery point, qualitative stream velocities, and industrial and municipal water intakes. This information is available on hard copy and in electronic pdf format.

Colonial's information management system has detailed environmental data including access to the following data: Critical Habitat, Ecological Concern, and the Environmental Sensitivity Index information. The system also includes online access to the identified environmentally sensitive areas including the following information:

State or River;
ESA ID;
Latitude;
Longitude;
Colonial Pipeline Quad Name;
Sensitive Area Name; and

Contact / Phone Number.

Specific environmentally sensitive areas are discussed in the following sections.

ENVIRONMENTALLY SENSITIVE AREAS

As stated above, this section includes identified environmentally sensitive ecological and human use areas across Colonial Pipeline's Southeast District including the States of Virginia, North Carolina, South Carolina, Tennessee, Georgia, and Alabama, respectively. The following information can also be viewed within the Colonial Pipeline Navigator Software. The information for each State is presented as follows:

VIRGINIA – Pages 3-5
NORTH CAROLINA – Pages 6-12
SOUTH CAROLINA – Pages 13-14
TENNESSEE – Pages 15-31
GEORGIA - Pages 32-53
ALABAMA – Pages 54-60

The environmentally sensitive areas are presented in a series of tables and include features such as wetlands, rivers, creeks, public lands, cultural and historical sites, marinas, and pipelines. The information in these tables include: an internal identification number, name of environmentally sensitive area, corresponding Colonial Pipeline quadrangle number, and contact information for the environmentally sensitive areas (where applicable). These data are integrated into Colonial's information management system and can be searched via the internal identification number.

Information on environmentally sensitive areas across Colonial's Southeast District corridor for each state is separated into three main categories. Inland areas, major rivers, and threatened and endangered species. These categories are described as follows:

Inland Areas. Environmentally sensitive areas in inland areas include terrestrial, smaller water features, and human use areas identified within approximately one mile of the pipeline. Water features within these areas are identified if they are major lakes or have a flow rate of 10 cubic meters per second (cms) or higher (based on data from USGS's EDNA Derived Watersheds (http://edna.usgs.gov/watersheds/). There are other water features within the pipeline corridor that have a flow rate of less than 10 cms and are not individually identified in this emergency response plan. However, these features are recognized as environmentally sensitive areas to protect and include smaller creeks, streams, headwater areas, and critical habitats.

Major Rivers. There are 13 "major rivers" within the Southeast District. Rivers were considered to be "major rivers" based upon the ecological and human use areas that could potentially be affected. For each of these rivers, environmentally sensitive areas are identified within approximately 75 miles downgradient of pipeline crossings, or at a significant surface water feature where the flow rate is expected to be reduced (e.g., lake, reservoir) to allow emergency response and recovery operations to efficiently manage the potential for downgradient exposures, whichever occurs first.

In addition, it should also be recognized that there are numerous smaller rivers, creeks, wetlands, and tributaries that are located along the pipeline route and between the major rivers identified. Many of these smaller rivers, creeks, wetlands, and tributaries, including associated environmentally sensitive areas, are also identified in this section of the plan and associated appendices if they have a base flow

rate of 10 cubic meters per second (cms) or higher (based on data from USGS's EDNA Derived Watersheds (http://edna.usgs.gov/watersheds/). Lastly, in the event of a release, environmentally sensitive areas associated with any streams with a base flow of less than 10 cms will be identified and addressed through direct coordination with the local on-site state and federal natural resource agencies.

Threatened and Endangered Species. Federally-listed threatened and endangered species are provided for all counties through which the pipeline traverses (obtained from US Fish and Wildlife Service's Information for Planning and Conservation [IPaC by USFWS]; https://ecos.fws.gov/ipac/). For the inland portions of the pipeline, a polygon that included the pipeline with a one-mile buffer on either side was imported for each state into the USFWS Environmental Conservation Online System (ECOS) website to identify federally listed species in that area. Similarly, for the river portions of the pipeline, a polygon that encompassed the river area was imported into the ECOS website to identify federally listed species along the river corridor.

The environmentally sensitive areas by state are provided in the following sections.

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

Virginia

1. Description

In Colonial's Southeast District, the pipeline traverses a portion of southern Virginia. The remainder of the pipeline in Virginia is considered part of Colonial's Northeast District and is addressed in a separate EMP. The portion of the pipeline in the Southeast District is predominantly rural with a mixture of forested and agricultural areas. The pipeline traverses two major rivers within this portion of Virginia (the Dan River and the Staunton River), as well as several smaller rivers and creeks. Several lakes and waterways are also located within the one-mile corridor of the pipeline.

2. Water Intakes

Oil may become entrained in water intake structures, causing extensive and expensive damage, and possible harm if the material is flammable or explosive. All precautions should be taken to prevent such materials from entering water intakes. In the event of a spill in the vicinity of a water intake, the point of contact should be notified immediately. Water intake locations are presented in Section 09.06.00 of this plan.

3. Access

The sensitive inland areas (i.e., within one mile from the pipeline) are generally accessible by vehicle or by foot. The sensitive areas along the river (i.e., within approximately 75 miles downgradient from major river crossings) are generally accessible by foot, boat and vehicle, depending on the terrain.

4. Sensitive Inland Areas

Within the Virginia inland area, Featherfin Wildlife Management Area (WMA), Camp Hat Creek, the Dan River, and the Staunton River are several of the sensitive areas and should be a priority for protection and cleanup. A listing of the sensitive areas is provided in the following table. Additional details, including geospatial information, can be found in Appendix B.

Virginia Sensitive Areas (Inland Areas)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
VA-01	FEATHERFIN WMA	VA-14	VIRGINIA DEPARTMENT OF GAME AND INLAND FISHERIES (434) 525-7522;
VA-02	CAMP HAT CREEK (CAMPGROUND)	VA-10	MAIN OFFICE (434) 376-1250;
VA-03	STAUNTON RIVER	VA-10	N/A = PHYSICAL FEATURE
VA-04	ELKHORN LAKE AND CAMPGROUND	VA-6	(434) 432-9203
VA-05	TUSCARORA COUNTRY CLUB	VA-3	(434) 724-1387
VA-06	DAN RIVER	NC-26	N/A = PHYSICAL FEATURE
VA-07	BROOKNEAL DIXIE YOUTH BASEBALL AND TENNIS RECREATION AREA	VA-10	(434) 376-7604

5. Sensitive Areas along Rivers

The pipeline crosses two major rivers within Virginia: the Staunton River and the Dan River. Along the Staunton River, three wildlife management areas (Bluestone WMA, Hogan Creek WMA and Buffalo WMA) and the John H. Kerr Reservoir. These areas are environmentally sensitive areas and should be a priority for protection and cleanup measures. A listing of the sensitive areas along the Staunton River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Virginia Sensitive Areas (Staunton River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
VA-SR-01	BROOKNEAL PUBLIC BOAT RAMP	VA-10	RADIO RD, NATHALIE, VA 24577
VA-SR-02	STAUNTON RIVER BATTLEFIELD STATE PARK TO THE EAST AND WEST	VA-12F	VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION (434) 454-4317
VA-SR-03	START OF JOHN H. KERR RESERVOIR TO THE SOUTH	VA-12H	UNITED STATES ARMY CORPS OF ENGINEERS (434) 738-6143
VA-SR-04	START OF HOGAN CREEK WMA TO THE EAST	VA-12H	(434) 738-6143
VA-SR-05	START OF STAUNTON RIVER STATE PARK TO THE SOUTH	VA-12H	(434) 572-4623
VA-SR-06	STAUNTON VIEW PARK AND BOAT RAMP TO THE NORTH	VA-12H	(434) 738-6143
VA-SR-07	BUFFALO WMA TO THE WEST	VA-12H	USACOE (434) 738-6101
VA-SR-08	BUFFALO PARK TO THE WEST	VA-12H	USACOE (434) 374-2063
VA-SR-09	BLUESTONE WMA TO THE EAST	VA-12I	USACOE (434) 738-6101

Along the Dan River, the Danville Wastewater Treatment Facility, Schoolfield Reservoir, and Banister River are environmentally sensitive areas and are a priority for protection and cleanup measures. A listing of the sensitive areas along the Dan River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

Virginia Sensitive Areas (Dan River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
VA-DR-01	ABREU GROGAN PARK	VA-2	DANVILLE PARKS AND RECREATION (434) 799-5215
VA-DR-02	SCHOOLFIELD RESERVOIR	VA-2	DANVILLE PARKS AND RECREATION (434) 799-5215
VA-DR-03	BALLOU PARK	VA-2	DANVILLE PARKS AND RECREATION (434) 799-5215
VA-DR-04	RIVERWALK TRAIL	VA-2	DANVILLE PARKS AND RECREATION (434) 799-5215
VA-DR-05	CAMILLA WILLIAMS PARK	VA-2	DANVILLE PARKS AND RECREATION (434) 799-5215
VA-DR-06	RIVERSIDE RESERVOIR/DAMS	VA-2	N/A = PHYSICAL FEATURE
VA-DR-07	CARRINGTON PAVILION	VA-2	DANVILLE PARKS AND RECREATION (434) 797-8961
VA-DR-08	DAN DANIEL MEMORIAL PARK/ PHILLIP WYATT MEMORIAL PARK	VA-4A	DANVILLE PARKS AND RECREATION (434) 799-5215
VA-DR-09	ANGLERS PARK	VA-4A	DANVILLE PARKS AND RECREATION (434) 799-5215
VA-DR-10	START OF TOBACCO HERITAGE TRAIL	VA-6B	(434) 447-7101
VA-DR-11	BANISTER RIVER	VA-11D	N/A = PHYSICAL FEATURE
VA-DR-12	STAUNTON RIVER STATE PARK AND BOAT RAMP TO THE NORTH	VA-12H	VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION (434) 572-4623
VA-DR-13	DANVILLE WASTEWATER TREATMENT PLANT AND BRIDGE CROSSING	VA-4A	DANVILLE UTILTIES WASTEWATER TREATMENT (434) 799-5137

It should be noted that, although the Staunton and Dan Rivers are the only major rivers that the pipeline crosses, there are several other smaller rivers, creeks and ponded waters that are considered environmentally sensitive as well. Those rivers and creeks above a base flow of 10 cms as well as significant ponded waters (i.e., lakes, ponds, and reservoirs) are listed/highlighted in the above tables.

6. Threatened and Endangered Species

A summary of threatened and endangered species along the pipeline corridor in the inland areas of Virginia and within approximately 75 miles downgradient of where the pipeline intersects the Staunton River and the Dan River is provided in the table below. Specific information on these threatened and endangered species as well as migratory birds and critical habitats in the area are provided in Appendix A.

Threatened and Endangered Species (Virginia)

	Inland Virginia	Dan River	Staunton River
Threatened and Endangered Species			
Overall	3	2	3
Fish	1	1	0
Flowering Plants	0	0	2
Mammals	2	1	1
Migratory Birds	18	16	15

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

North Carolina

1. Description

In Colonial's Southeast District, the pipeline traverses across a section of North Carolina. This area is comprised predominantly of mixed rural and agricultural areas, with the exception of the metropolitan areas of Charlotte, Greensboro, Raleigh, and Fayetteville. The pipeline crosses one major river within North Carolina (the Catawba River), as well as several smaller rivers and creeks. Several lakes, waterways, State Parks, and historical areas are also located within the one-mile corridor of the pipeline.

2. Water Intakes

Oil may become entrained in water intake structures, causing extensive and expensive damage, and possible harm if the material is flammable or explosive. All precautions should be taken to prevent such materials from entering water intakes in the event of a spill in the vicinity of a water intake in which case the point of contact should be notified immediately. Water intake locations are presented in Section 09.06.00 of this plan.

3. Access

The environmentally sensitive inland areas are generally accessible by vehicle or on foot. The sensitive areas along the river (i.e., within approximately 75 miles downgradient from the Catawba River crossing) are generally accessible by boat and vehicle.

4. Sensitive Inland Areas

Within the North Carolina inland areas, Chinqua Penn Plantation Historical Landmark and several state parks (Crowders Mountain State Park, Raven Rock State Park, and Haw River State Park) as well as several lakes and rivers (Neuse River, Cape Fear, Little River, and Catawba River) are environmentally sensitive and should be a priority for protection and cleanup measures. A listing of the sensitive areas along the inland portion of the pipeline are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

North Carolina Sensitive Areas (Inland Areas)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
NC-01	WOLF CREEK GOLF CLUB	NC-24	(336) 349-7660
NC-02	CHINQUA PENN PLANTATION HISTORICAL LANDMARK	NC-24	(336) 349-4576
NC-03	LAKE HUNT	NC-23	N/A = PHYSICAL FEATURE
NC-04	LAKE REIDSVILLE	NC-23	N/A = PHYSICAL FEATURE
NC-05	HAW RIVER STATE PARK	NC-22	NORTH CAROLINA DIVISION OF PARKS AND RECREATION (336) 342-8163
NC-06	LAKE TOWNSEND	NC-21	N/A = PHYSICAL FEATURE
NC-07	LAKE BRANDT	NC-21	N/A = PHYSICAL FEATURE

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
NC-08	GUILFORD COURTHOUSE NATIONAL MILITARY PARK	NC-21	NATIONAL PARK SERVICE (336) 288-1776
NC-09	TANNENBAUM HISTORIC PARK	NC-21	(336) 545-5315
NC-10	PROFHLIFIC PARK	NC-20	(336) 665-5233
NC-11	CAROLYN S. ALLEN COMMUNITY PARK	NC-20	(336) 373-2955
NC-12	LEONARD RECREATION CENTER	SLD-1	(336) 297-4889
NC-13	GUILFORD MEMORIAL PARK	SLD-1	(336) 299-5177
NC-14	SEDGEFIELD COUNTRY CLUB	SLD-1	(336) 299-5324
NC-15	HAGAN-STONE PARK	SLD-4	GUILFORD COUNTY GOVERNMENT (336) 641-2090
NC-16	SPORT OF HORSES PARK	SLD-7	(866) 800-0764
NC-17	HAW RIVER	SLD-9	N/A = PHYSICAL FEATURE
NC-18	THE PRESERVE AT JORDAN LAKE GOLF CLUB	SLD-9	(919) 542-5501
NC-19	JORDAN LAKE EDUCATIONAL STATE FOREST	SLD-10	JORDAN LAKE EDUCATIONAL STATE FOREST (919) 542-1154
NC-20	JORDAN LAKE	SLD-10	N/A = PHYSICAL FEATURE
NC-21	MEISHIN KYUDOJO	SLD-11	(919) 303-5726
NC-22	CARY-APEX WATER PLANT	SLD-11	TOWN OF CARY (919) 362-5502
NC-23	KELLY ROAD PARK	SLD-12	TOWN OF APEX (919) 249-3419
NC-24	BEAVER CREEK GREENWAY	SLD-12	TOWN OF APEX (919) 249-3402
NC-25	CAMP MUSART	SLD-13	(919) 267-5509
NC-26	APEX JAYCEE PARK	SLD-13	TOWN OF APEX (919) 249-3400
NC-27	JONES PARK	SLD-13	(919) 362-0319
NC-28	NORRIS PARK	SLD-13	APEX CHAMBER OF COMMERCE (919) 249-1002
NC-29	CLUSTER OF SMALL PONDS	SLD-13	N/A = PHYSICAL FEATURE
NC-30	WATER RECLAMATION	SLD-13	TOWN OF APEX (919) 249-3428
NC-31	KNIGHTS PLAY GOLF CENTER	SLD-13	(919) 303-4653
NC-32	CROWDER DISTRICT PARK	SLD-13	WAKE COUNTY PARKS AND RECREATION (919) 662-2850
NC-33	JAMISON / MIDDLE CREEK SCHOOL PARK	SLD-13	TOWN OF CARY (919) 771-1295
NC-34	THE HOBBIT GARDEN	SLD-14A	(919) 772-6761
NC-35	NEUSE RIVER	SLD-18	N/A = PHYSICAL FEATURE

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
NC-36	VETERANS PARK	SLD-13	HOLLY SPRINGS PARKS, FACILITIES, AND GREENWAYS (919) 557-9600
NC-37	JONES PARK	SLD-13	HOLLY SPRINGS PARKS, FACILITIES, AND GREENWAYS (919) 557-9600
NC-38	HOLLY SPRINGS PARKS AND RECREATION DEPARTMENT	SLD-13	HOLLY SPRINGS PARKS, FACILITIES, AND GREENWAYS (919) 557-3930
NC-39	HOLLY SPRINGS COMMUNITY CENTER	SLD-13	HOLLY SPRINGS PARKS, FACILITIES, AND GREENWAYS (919) 557-9600
NC-40	PARRISH WOMBLE PARK	SLD-13	HOLLY SPRINGS PARKS, FACILITIES, AND GREENWAYS (919) 557-9600
NC-41	SUGG FARM PARK	SLD-13	HOLLY SPRINGS PARKS, FACILITIES, AND GREENWAYS (919) 557-2496
NC-42	BASS LAKE PARK	SLD-13	HOLLY SPRINGS PARKS, FACILITIES, AND GREENWAYS (919) 557-2496
NC-43	FLEMING LOOP RECREATIONAL PARK	FVD-2	FUQUAY VARINA PARS AND RECREATION (919) 552-1430
NC-44	RAVEN ROCK STATE PARK	FVD-3	NORTH CAROLINA DIVISION OF PARKS & RECREATION (910) 893-4888
NC-45	CAPE FEAR RIVER	FVD-3	N/A = PHYSICAL FEATURE
NC-46	LITTLE RIVER	FVD-6	N/A = PHYSICAL FEATURE
NC-47	SMITH LAKE	FVD-6	N/A = PHYSICAL FEATURE
NC-48	ROSE LAKE	FVD-7	N/A = PHYSICAL FEATURE
NC-49	BONNIE DOONE LAKE	FVD-7	N/A = PHYSICAL FEATURE
NC-50	KORNBOW LAKE	FVD-7	N/A = PHYSICAL FEATURE
NC-51	APEX LAKE COMMUNITY PARK	SLD-13	(919) 249-3402
NC-52	APEX COMMUNITY PARK	RD-2	TOWN OF APEX (919) 249-3402
NC-53	ANNIE L. JONES PARK	RD-2	TOWN OF CARY (919) 469-4061
NC-54	BISHOP GATE	RD-2	--
NC-55	FRED G POND METRO PARK	RD-2	TOWN OF CARY (919) 469-4100
NC-56	PRESTON WOOD COUNTRY CLUB	RD-2	(919) 467-2566
NC-57	INDIAN CREEK GREENWAY AND TRAILHEAD	RD-2	TOWN OF MORRISVILLE (919) 463-7110
NC-58	MORRISVILLE PARKS AND RECREATION	RD-2	(919) 463-7110

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
NC-59	RURITAN PARK	RD-2	TOWN OF MORRISVILLE (919) 463-6215
NC-60	CEDAR FORK DISTRICT PARK	RD-2	TOWN OF MORRISVILLE (919) 463-7110
NC-61	LAKE CRABTREE	RD-2	N/A = PHYSICAL FEATURE
NC-62	LAKE CRABTREE COUNTRY PARK	RD-2	WAKE COUNTY GOVERNMENT (919) 460-3390
NC-63	OAK HOLLOW LAKE	SLD-1	N/A = PHYSICAL FEATURE
NC-64	JOHNSON STREET DISC GOLF PARK	NC-18	--
NC-65	LAKE TOM-A-LEX	NC-16	N/A = PHYSICAL FEATURE
NC-66	NORTHSIDE PARK	NC-14	--
NC-67	SAPONA RIDGE COUNTRY CLUB	NC-14	(336) 956-6245
NC-68	YADKIN RIVER	NC-12	N/A = PHYSICAL FEATURE
NC-69	ELLIS PARK	NC-12	ROWAN COUNTY PARKS AND RECREATION (704) 216-7783
NC-70	ROWAN MEMORIAL PARK	NC-12	(704) 636-8751
NC-71	WARRIOR GOLF CLUB	NC-9	(704) 856-0871
NC-72	DON T. HOWELL RESERVOIR	NC-8	CABARRUS COUNTY WATER AND SEWER AUTHORITY 704-786-1783
NC-73	BRADFORD PARK	NC-7	HUNTERSVILLE PARKS AND RECREATION (704) 766-2220
NC-74	SKYBROOK GOLF CLUB	NC-7	(704) 948-6611
NC-75	DAVID B. WAYMER AEROMODELER FLYING FIELD	NC-7	CHARLOTTE MECKLENBURG COUNTY (704) 432-1369
NC-76	HUNTERSVILLE PARKS AND RECREATION DEPARTMENT	NC-7	(704) 766-2220
NC-77	HUNTERSVILLE ATHLETIC PARK	NC-7	HUNTERSVILLE PARKS AND RECREATION (704) 948-2811
NC-78	HORNETS NEST PARK	NC-5	(704) 336-3568
NC-79	SUNSET HILLS PUBLIC GOLF COURSE	NC-5	(704) 399-0960
NC-80	MECKLENBURG WILDLIFE CLUB LAKE	NC-5	N/A = PHYSICAL FEATURE
NC-81	ROBERT L SMITH DISTRICT PARK	NC-5	MECKLENBURG COUNTY (704) 336-8869
NC-82	FIELDRIDGE ACRES	CHAR-2	(704) 399-3521
NC-83	CATAWBA RIVER	NC-4	N/A = PHYSICAL FEATURE
NC-84	BELMONT PARK AND RECREATION	NC-3	(704) 825-8191

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
NC-85	DAVIS PARK	NC-3	CITY OF BELMONT(704) 825-8191
NC-86	SOUTH FORK CATAWBA RIVER	NC-3	N/A = PHYSICAL FEATURE
NC-87	RIVERSIDE PARK AND GREENWAY	NC-3	(704) 824-4231
NC-88	MARTHAS RIVERS PARK	NC-2	(704) 866-6839
NC-89	DAVIS PARK	NC-2	GASTON COUNTY (704) 922-2160
NC-90	CROWDERS MOUNTAIN STATE PARK	SC-20	NORTH CAROLINA STATE PARKS (704) 853-5375

5. Sensitive Areas along Rivers

The pipeline crosses the Catawba River within North Carolina, which flows downgradient into South Carolina. Environmental sensitive areas identified along the river are located in both North Carolina and South Carolina, but are all presented in this section. Along the Catawba River, five water treatment facilities (Belmont Water Treatment Plant, Manchester Creek Wastewater Treatment Plant, Chester Metropolitan District, Indian Land Water and Sewer Treatment Plant, and one unidentified wastewater facility), McDowell Nature Preserve, and two beach parks (Windjammer Beach Park and Pitcairn Cove Beach Park) are environmentally sensitive and should be a priority for protection and cleanup measures. A listing of the sensitive areas along the Catawba River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

North Carolina Sensitive Areas (Catawba River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
NC-CR-01	PIPELINE CROSSING	NC-4	N/A = PHYSICAL FEATURE
NC-CR-02	BELMONT WATER TREATMENT PLANT	NC-3	CITY OF BELMONT (704) 825-2625
NC-CR-03	POTENTIAL WWTP	NC-3	CITY OF BELMONT (704) 825-2625
NC-CR-04	LAKE WYLIE PARK	NC-3	--
NC-CR-05	NORTH CAROLINA STATE WILDLIFE LANDING	NC-3	--
NC-CR-06	HARBORTOWNE MARINA AND SHIP STORE	NC-3	(704) 825-5050
NC-CR-07	SOUTH FORK CATAWBA RIVER CONFLUENCE	NC-3	N/A = PHYSICAL FEATURE
NC-CR-08	DANIEL STOWE BOTANICAL GARDEN	NC-3	(704) 825-4990
NC-CR-09	TERRY'S MARINA	NC-3A	(704) 588-0418
NC-CR-10	CAROLINA BOAT CLUB	NC-3A	(704) 504-1306

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
SC-CR-11	PIER 88 YACHT CLUB/RIVER HILLS MARINA CLUB	NC-3A	(803) 831-0088
SC-CR-12	COMMODORE YACHT CLUB	NC-3A	GEORGE MEDLER (803)-389-0172
SC-CR-13	WINDJAMMER BEACH PARK	NC-3A	803-548-3512/803-548-3787
SC-CR-14	TEGA CAY MARINA	NC-3A	803-548-3715
NC-CR-15	MCDOWELL NATURE PRESERVE	NC-3A	LAKE WYLIE MARINE COMMISSION 704-588-5224
NC-CR-16	COPPERHEAD ISLAND BOAT LAUNCH	NC-3A	704-588-5224
SC-CR-17	PITCAIRN COVE BEACH PARK	NC-3A	CITY OF TEGA CAY 803-548-3512
SC-CR-18	EBENEZER PARK/LAKE CLUB MARINA	NC-3A	803-366-6620 (EBENEZER PARK)/ 803-324-2232 (LAKE CLUB MARINA)
SC-CR-19	FORT MILL DAM	NC-3A	N/A = PHYSICAL FEATURE
SC-CR-20	CATAWBA RIVER ACCESS FORT MILL DAM	NC-3A	--
SC-CR-21	MANCHESTER CREEK WASTEWATER TREATMENT PLANT	N/A	CITY OF ROCK HILL DEPARTMENT OF SEWER SERVICE 803-329-5500
SC-CR-22	RIVER PARK	N/A	CITY OF ROCK HILL DEPARTMENT OF PARKS 803-329-5627
SC-CR-23	START OF CATAWBA NATION GREENWAY TRAIL	N/A	CATAWBA INDIAN NATION 803-366-4792
SC-CR-24	LANSFORD CANAL STATE PARK	N/A	SOUTH CAROLINA DEPARTMENT OF PARKS 803-789-5800
SC-CR-25	CHESTER METROPOLITAN DISTRICT (LANCASTER HWY; POTENTIAL WATER AND TREATMENT FACILITY)	N/A	803-872-4418
SC-CR-26	EDGEWATER GOLF CLUB	N/A	803-283-9800
SC-CR-27	DAM	N/A	N/A = PHYSICAL FEATURE
SC-CR-28	DAM	N/A	N/A = PHYSICAL FEATURE
SC-CR-29	DAM	N/A	N/A = PHYSICAL FEATURE
SC-CR-30	DAM	N/A	N/A = PHYSICAL FEATURE
SC-CR-31	LAKE WATEREE	N/A	N/A = PHYSICAL FEATURE
SC-CR-32	CATAWBA INDIAN NATION RESERVATION / CATAWBA CULTURAL PRESERVATION	N/A	803-366-4792
SC-CR-33	CAROLINA LAKES GOLF CLUB	N/A	803-547-9688
SC-CR-34	WATERFORD GOLF CLUB	N/A	803-324-0300
SC-CR-35	WESTMINSTER PARK	NC-3A	ROCK HILL PARKS AND RECREATION (803) 329-5620

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
SC-CR-36	CAMP CANAAN CAMPGROUND	NC-3A	803-327-6932
SC-CR-37	INDIAN LAND WATER AND SEWER TREATMENT PLANT	N/A	LANCASTER COUNTY WATER AND SEWER DISTRICT 803-396-3883
N/A = Not applicable			

It should be noted that, although the Catawba River is the only major river that the pipeline crosses, there are several other smaller rivers, creeks and ponded waters that are considered environmentally sensitive as well. Those rivers and creeks above a base flow of 10 cms as well as significant ponded waters (i.e., lakes, ponds, and reservoirs) are listed/highlighted in the above tables.

6. Threatened and Endangered Species

A summary of threatened and endangered species along the pipeline corridor in the inland areas of North Carolina and within approximately 75 miles downgradient of where the pipeline intersects the Catawba River is provided in the table below. Specific information on these threatened and endangered species as well as migratory birds and critical habitats in the area are provided in Appendix A.

Threatened and Endangered Species (North Carolina)

	Inland North Carolina	Catawba River
Threatened and Endangered Species		
Overall	21	9
Birds	1	1
Clams	4	1
Ferns and Allies	0	1
Fish	2	0
Flowering Plants	11	5
Insects	1	0
Mammals	1	1
Reptiles	1	0
Migratory Birds	23	17

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

South Carolina

1. Description

The pipeline traverses mostly wooded rural areas in the northern portion of South Carolina with the exception of urban areas encountered at or near Greenville and Spartanburg. It should be noted that the Savannah River is a major river that forms most of the border between the State of South Carolina and Georgia. As these states meet at the river centerline, information on environmentally sensitive areas for the Savannah River are duplicated for each state. Similarly, the pipeline crosses the Catawba River, another major river in North Carolina near the border of North Carolina and South Carolina. The environmentally sensitive areas for the Catawba River are duplicated for each state as well. In addition to the Savannah River and Catawba River, the pipeline does cross several smaller rivers and creeks. Several lakes and waterways are also located within the one-mile corridor of the pipeline.

2. Water Intakes

Oil may become entrained in water intake structures, causing extensive and expensive damage, and possible harm if the material is flammable or explosive. All precautions should be taken to prevent such materials from entering water intakes in the event of a spill in the vicinity of a water intake in which case the point of contact should be notified immediately. Water intake locations are presented in Section 09.06.00 of this plan.

3. Access

The environmentally sensitive inland areas are generally accessible by vehicle or on foot. The sensitive areas along the river (i.e., within approximately 75 miles downgradient from the Savannah River crossing) are generally accessible by boat and vehicle.

4. Sensitive Inland Areas

Within the South Carolina inland areas, environmentally sensitive areas include Kings Mountain State Park and Backer Creek State Park and should be a priority for protection and cleanup measures. A listing of the sensitive inland areas in South Carolina are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

South Carolina Sensitive Areas (Inland Areas)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
SC-01	KINGS MOUNTAIN STATE PARK	SC-20	SOUTH CAROLINA STATE PARKS (803) 222-3209
SC-02	KINGS MOUNTAIN NATIONAL MILITARY PARK	SC-20	NATIONAL PARK SERVICE (864) 936-7921
SC-03	BROAD RIVER	SC-19	N/A = PHYSICAL FEATURE
SC-04	CHEROKEE FORD RECREATION AREA	SC-17	(864) 487-2733
SC-05	GAFFNEY COUNTRY CLUB	SC-17	(864) 489-4607
SC-06	HAMMETT LAKE	SC-16	N/A = PHYSICAL FEATURE

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
SC-07	PACOLET RIVER	SC-15	N/A = PHYSICAL FEATURE
SC-08	THE COUNTRY CLUB OF SPARTANBURG	SC-14	(864) 583-3661
SC-09	THE CREEK GOLF CLUB	SC-14	(864) 583-7084
SC-10	CROFT STATE PARK	SC-14	SOUTH CAROLINA STATE PARKS (864) 585-1283
SC-11	THE CAROLINA COUNTRY CLUB	SC-13	(864) 583-1246
SC-12	FOX RUN COUNTRY CLUB	SC-13	(864) 967-9505
SC-13	CANNON MEMORIAL PARK	SC-9	(864) 862-9298
SC-14	SALUDA RIVER	SC-6	N/A = PHYSICAL FEATURE
SC-15	GARDEN OF MEMORIES	AUG-2	(864) 338-7022
SC-16	LONG CANCE SCENIC AREA	AUG-6	--
SC-17	BACKER CREEK STATE PARK	AUG-8	SOUTH CAROLINA STATE PARKS (864) 443-2457
SC-18	SAVANNAH RIVER	AUG-14	N/A = PHYSICAL FEATURE
SC-19	MULDROW PARK	SC-4	--
SC-20	BROADWAY LAKE	SC-4	N/A = PHYSICAL FEATURE
SC-21	LAKE HARTWELL	GA-26	N/A = PHYSICAL FEATURE
SC-22	SAVANNAH RIVER	GA-26	N/A = PHYSICAL FEATURE

5. Sensitive Areas along Rivers

As stated above, the Savannah River is a major river that forms most of the border between the State of South Carolina and Georgia. As these states meet at the river centerline, information on environmentally sensitive areas for the Savannah River are duplicated for each state. Environmentally sensitive areas on the Savannah River downgradient of the pipeline's crossing are provided in the table below.

Along the Savannah River, Knox Scout Reservation and Wildlife Area, four state parks (Richard B. Russell, Bobby Brown, Baker Creek, and Elijah Clark), three water treatment facilities (North Augusta Water Treatment Plant, Aiken County Water Treatment Facility, and one unidentified potential water treatment facility), and four archaeological sites are considered environmentally sensitive and should be a priority for protection and cleanup measures in the event of a spill. A listing of the sensitive areas along the Savannah River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Georgia Sensitive Areas (Savannah River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-SR-01	UNNAMED POND	GA-26	N/A = PHYSICAL FEATURE
GA-SR-02	UNNAMED BOAT RAMP	GA-26	--
GA-SR-03	UNNAMED BOAT RAMP	GA-26	--
GA-SR-04	UNNAMED BOAT RAMP	SC-1A	--

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-SR-05	RICHARD B. RUSSELL STATE PARK	GA-26A	(706) 213-2045
GA-SR-06	ARROWHEAD POINTE GOLF COURSE	SC-1B	(706) 283-6000
GA-SR-07	UNNAMED BOAT RAMP / PARK	SC-1B	--
GA-SR-08	UNNAMED BOAT RAMP	SC-1B	--
GA-SR-09	ALLEN CREEK BOAT RAMP	SC-1B	--
GA-SR-10	UNNAMED PARK	SC-1B	--
GA-SR-11	CALHOUN FALLS STATE RECREATION AREA	SC-4C	(864) 447-8267
GA-SR-12	UNNAMED MARINA / BOAT RAMP	SC-4C	--
GA-SR-13	UNNAMED BOAT RAMP	SC-4C	--
GA-SR-14	UNNAMED BOAT RAMP	SC-4C	--
GA-SR-15	UNNAMED BOAT RAMP	GA-26A	--
GA-SR-16	LAKE RUSSELL BOAT RAMP	SC-4C	--
GA-SR-17	BOBBY BROWN STATE PARK	N/A	(706) 359-3458
GA-SR-18	MT. CARMEL PARK NORTH	N/A	--
GA-SR-19	PATTERSON BRANCH PICNIC AREA / PARK	N/A	--
GA-SR-20	LEROYS FERRY RECREATION AREA	AUG-6B	USACOE (877) 444-6777
GA-SR-21	FISHING CREEK PUBLIC USE AREA	N/A	--
GA-SR-22	HICKORY KNOB STATE RESORT PARK AND GOLF	AUG-6B	(864) 391-2450
GA-SR-23	SAVANNAH LAKES VILLAGE GOLF CLUB	AUG-6B	(864) 391-4115
GA-SR-24	BAKER CREEK STATE PARK	AUG-6B	(864) 443-2457
GA-SR-25	ELIJAH CLARK STATE PARK	N/A	(706) 359-3458
GA-SR-26	UNNAMED BOAT RAMP	N/A	--
GA-SR-27	SAVANNAH LAKES MARINA	N/A	(864) 391-3477
GA-SR-28	CHAMBERLAIN FERRY PICNIC AREA / PARK	AUG-6C	--
GA-SR-29	DORN FISH FACILITY	AUG-6C	--
GA-SR-30	UNNAMED BOAT RAMP	AUG-6C	--
GA-SR-31	MONTICELLO GOLF COURSE	AUG-6A	--
GA-SR-32	BUFFALO CREEK RECREATION AREA	AUG-6B	--
GA-SR-33	CAMPGROUND	AUG-6C	--
GA-SR-34	POINTE PLEASANT PARK	AUG-6C	--
GA-SR-35	CAMP DANIEL MARSHALL	AUG-6C	(706) 359-7292
GA-SR-36	KNOX SCOUT RESERVATION / WILDLIFE AREA	AUG-6C	(706) 359-5422
GA-SR-37	PARKSVILLE RECREATION AREA	AUG-9	USACOE (800) 533-3478

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-SR-38	PARKSVILLE CAMPGROUND	AUG-9	USACOE (800) 533-3478
GA-SR-39	HAMILTON BRANCH STATE PARK	AUG-9	(864) 333-2223
GA-SR-40	CAMPGROUND	AUG-9A	--
GA-SR-41	CAMPGROUND	AUG-9A	--
GA-SR-42	CAMPGROUND	AUG-9A	--
GA-SR-43	WILDWOOD PARK / DISK GOLF / CAMPGROUNDS)	N/A	(706) 541-0586
GA-SR-44	FORT GORDON RECREATION AREA	N/A	--
GA-SR-45	MISTLETOE STATE PARK	N/A	GEORGIA STATE PARKS (706) 541-0321
GA-SR-46	HOLIDAY PARK	N/A	--
GA-SR-47	AMITY RECREATION AREA / BOAT RAMP	N/A	USACOE (706) 359-1171
GA-SR-48	BOAT RAMP	N/A	--
GA-SR-49	CHEROKEE BOAT RAMP	N/A	--
GA-SR-50	BOAT RAMP	N/A	--
GA-SR-51	CLARKE'S HILL LAKE BOAT RAMP	AUG-6C	--
GA-SR-52	ROCKY BRANCH GOLF COURSE	AUG-6C	(706) 359-4303
GA-SR-53	LAKE SPRINGS RECREATION AREA	AUG-9A	(706) 541-0150
GA-SR-54	TRADE WINDS MARINA	AUG-9A	(706) 541-1380
GA-SR-55	RIVER DAM	AUG-9A	N/A = PHYSICAL FEATURE
GA-SR-56	BELOW DAM RECREATION AREA	AUG-9A	(864) 333-1100
GA-SR-57	BOAT RAMP	AUG-9A	--
GA-SR-58	BEACH / PARK	AUG-9A	--
GA-SR-59	BOAT RAMP	AUG-9A	--
GA-SR-60	AUGUSTA SAILING CLUB / MARINA	AUG-9A	(706) 309-9463
GA-SR-61	WEST DAM RECREATION AREA	AUG-9A	USACOE (800) 533-3478
GA-SR-62	HAMILTON BRANCH CAMPGROUND	AUG-9A	SOUTH CAROLINA PARKS (864) 333-2223
GA-SR-63	LAKE SPRINGS CAMPGROUND	AUG-9A	(706) 541-0150
GA-SR-64	CLAY HILL CAMPGROUND	N/A	(706) 359-7495
GA-SR-65	RAYSVILLE MARINA	N/A	(706) 595-5582
GA-SR-66	RAYSVILLE CAMPGROUND	N/A	(706) 595-6759
GA-SR-67	CHAMPIONS RETREAT GOLF COURSE	N/A	(706) 854-6960
GA-SR-68	FURYS FERRY BOAT RAMP	AUG-13A	--
GA-SR-69	MIMS PT. INDIAN VILLAGE ARCHEOLOGICAL SITE	AUG-13A	--

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-SR-70	STEVENS CREEK PUBLIC PARK / BOAT RAMP	AUG-13A	--
GA-SR-71	HAMMONDS FERRY BOAT RAMP	AUG-14	--
GA-SR-72	RIVERWALK MARINA / BOAT RAMP	AUG-14	(706) 722-1388
GA-SR-73	NORTH AUGUSTA / RIVERVIEW PARKS ACTIVITY CENTER	AUG-14	(803) 441-4311
GA-SR-74	NORTH AUGUSTA WATER TREATMENT PLANT	AUG-14	CITY OF NORTH AUGUSTA (803) 279-2121 OR (803) 441-4202
GA-SR-75	DISC GOLF COURSE	AUG-14	--
GA-SR-76	EISENHOWER PARK	AUG-13A	(706) 821-2800
GA-SR-77	BOECKH PARK/ NORTH AUGUST GREENWAY	AUG-14	NORTH AUGUSTA DEPARTMENT OF PARKS AND RECREATION (803) 441-4300
GA-SR-78	THE RIVER GOLF CLUB	AUG-14	--
GA-SR-79	BRICK POND PARK	AUG-14	--
GA-SR-80	RIVERWALK AUGUSTA PARK	AUG-14	--
GA-SR-81	AIKEN COUNTY PUBLIC SERVICES AUTHORITY (POSSIBLE WATER TREATMENT FACILITY)	AUG-14	(803) 278-1911
GA-SR-82	PREHISTORIC INDIAN RIVERSTONE FISH TRAPS	AUG-13A	--
GA-SR-83	SAVANNAH RIVER BLUFFS HERITAGE PRESERVE	AUG-13A	SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES HERITAGE TRUST PROGRAM (803) 734-3886
GA-SR-84	STALLING 4300 YEAR-OLD INDIAN VILLAGE	AUG-13A	--
GA-SR-85	SAVANNAH RIVER DAM / PAVILION PARK / AUGUSTA CANAL WALKING TRAIL	AUG-13A	--
GA-SR-86	RECREATIONAL COMPLEX	AUG-14	--
GA-SR-87	POSSIBLE WASTEWATER TREATMENT FACILITY	AUG-14	--
GA-SR-88	MARINA (MARINA DRIVE)	GA-26C	--
GA-SR-89	RUSSELL DAM	SC-4C	N/A = PHYSICAL FEATURE
GA-SR-90	STROM THURMOND RESERVOIR	N/A	N/A = PHYSICAL FEATURE
GA-SR-91	2ND PIPELINE CROSSING	AUG-14	N/A = PHYSICAL FEATURE
GA-SR-92	SAVANNAH LOCK AND DAM / J. B. MESSERLY WASTEWATER TREATMENT PLANT	N/A	AUGUSTA UTILITIES (WASTEWATER TREATMENT) (706) 312-4154

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
	(APPROXIMATELY 2 MILES NORTHWEST)		
GA-SR-93	BURTON'S FERRY PUBLIC BOAT RAMP	N/A	--
GA-SR-94	JOHNSON'S LANDING	N/A	--
GA-SR-95	MCBEAN CREEK CONFLUENCE	N/A	--
GA-SR-96	JACKSON BOAT RAMP	N/A	--
GA-SR-97	PIPELINE CROSSING	GA-26	N/A = PHYSICAL FEATURE

N/A = Not applicable

Note: GA-SR-60 to GA-SR-80 are unlikely to be impacted in the event of a worse-case scenario oil spill due to the location within or downgradient of a large lake/reservoir system (J. Strom Thurmond Reservoir/Clarks Hill Lake however, these locations were included as a conservative measure.

As stated previously, the pipeline crosses the Catawba River in North Carolina close to the South Carolina border; therefore, information on environmentally sensitive areas for the Catawba River are duplicated for each state. Environmentally sensitive areas on Catawba River downgradient of the pipeline's crossing are provided in the table below.

Along the Catawba River, five water treatment facilities (Belmont Water Treatment Plant, Manchester Creek Wastewater Treatment Plant, Chester Metropolitan District, Indian Land Water and Sewer Treatment Plant, and one unidentified wastewater facility), McDowell Nature Preserve, and two beach parks (Windjammer Beach Park and Pitcairn Cove Beach Park) are environmentally sensitive and should be a priority for protection and cleanup measures. Additional details, including geospatial information, can also be found in Appendix B.

North Carolina Sensitive Areas (Catawba River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
NC-CR-01	PIPELINE CROSSING	NC-4	N/A = PHYSICAL FEATURE
NC-CR-02	BELMONT WATER TREATMENT PLANT	NC-3	CITY OF BELMONT (704) 825-2625
NC-CR-03	POTENTIAL WWTP	NC-3	CITY OF BELMONT (704) 825-2625
NC-CR-04	LAKE WYLIE PARK	NC-3	--
NC-CR-05	NORTH CAROLINA STATE WILDLIFE LANDING	NC-3	--
NC-CR-06	HARBORTOWNE MARINA AND SHIP STORE	NC-3	(704) 825-5050
NC-CR-07	SOUTH FORK CATAWBA RIVER CONFLUENCE	NC-3	N/A = PHYSICAL FEATURE
NC-CR-08	DANIEL STOWE BOTANICAL GARDEN	NC-3	(704) 825-4990
NC-CR-09	TERRY'S MARINA	NC-3A	(704) 588-0418
NC-CR-10	CAROLINA BOAT CLUB	NC-3A	(704) 504-1306

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
SC-CR-11	PIER 88 YACHT CLUB/RIVER HILLS MARINA CLUB	NC-3A	(803) 831-0088
SC-CR-12	COMMODORE YACHT CLUB	NC-3A	GEORGE MEDLER (803)-389-0172
SC-CR-13	WINDJAMMER BEACH PARK	NC-3A	803-548-3512/803-548-3787
SC-CR-14	TEGA CAY MARINA	NC-3A	803-548-3715
NC-CR-15	MCDOWELL NATURE PRESERVE	NC-3A	LAKE WYLIE MARINE COMMISSION 704-588-5224
NC-CR-16	COPPERHEAD ISLAND BOAT LAUNCH	NC-3A	704-588-5224
SC-CR-17	PITCAIRN COVE BEACH PARK	NC-3A	CITY OF TEGA CAY 803-548-3512
SC-CR-18	EBENEZER PARK/LAKE CLUB MARINA	NC-3A	803-366-6620 (EBENEZER PARK)/ 803-324-2232 (LAKE CLUB MARINA)
SC-CR-19	FORT MILL DAM	NC-3A	N/A = PHYSICAL FEATURE
SC-CR-20	CATAWBA RIVER ACCESS FORT MILL DAM	NC-3A	--
SC-CR-21	MANCHESTER CREEK WASTEWATER TREATMENT PLANT	N/A	CITY OF ROCK HILL DEPARTMENT OF SEWER SERVICE 803-329-5500
SC-CR-22	RIVER PARK	N/A	CITY OF ROCK HILL DEPARTMENT OF PARKS 803-329-5627
SC-CR-23	START OF CATAWBA NATION GREENWAY TRAIL	N/A	CATAWBA INDIAN NATION 803-366-4792
SC-CR-24	LANSFORD CANAL STATE PARK	N/A	SOUTH CAROLINA DEPARTMENT OF PARKS 803-789-5800
SC-CR-25	CHESTER METROPOLITAN DISTRICT (LANCASTER HWY; POTENTIAL WATER AND TREATMENT FACILITY)	N/A	803-872-4418
SC-CR-26	EDGEWATER GOLF CLUB	N/A	803-283-9800
SC-CR-27	DAM	N/A	N/A = PHYSICAL FEATURE
SC-CR-28	DAM	N/A	N/A = PHYSICAL FEATURE
SC-CR-29	DAM	N/A	N/A = PHYSICAL FEATURE
SC-CR-30	DAM	N/A	N/A = PHYSICAL FEATURE
SC-CR-31	LAKE WATEREE	N/A	N/A = PHYSICAL FEATURE
SC-CR-32	CATAWBA INDIAN NATION RESERVATION / CATAWBA CULTURAL PRESERVATION	N/A	803-366-4792
SC-CR-33	CAROLINA LAKES GOLF CLUB	N/A	803-547-9688
SC-CR-34	WATERFORD GOLF CLUB	N/A	803-324-0300
SC-CR-35	WESTMINSTER PARK	NC-3A	ROCK HILL PARKS AND RECREATION (803) 329-5620

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
SC-CR-36	CAMP CANAAN CAMPGROUND	NC-3A	803-327-6932
SC-CR-37	INDIAN LAND WATER AND SEWER TREATMENT PLANT	N/A	LANCASTER COUNTY WATER AND SEWER DISTRICT 803-396-3883
N/A = Not applicable			

It should be noted that, although the Savannah and Catawba Rivers are the only major rivers that the pipeline crosses, there are several other smaller rivers, creeks and ponded waters that are considered environmentally sensitive as well. Those rivers and creeks above a base flow of 10 cms as well as significant ponded waters (i.e., lakes, ponds, and reservoirs) are listed/highlighted in the above tables.

6. Threatened and Endangered Species

A summary of threatened and endangered species along the pipeline corridor in the inland areas of South Carolina and within approximately 75 miles downgradient of where the pipeline crosses the Savannah River is provided in the table below. Specific information on these threatened and endangered species as well as migratory birds and critical habitats in the area are provided in Appendix A.

Threatened and Endangered Species (South Carolina)

	Inland South Carolina	Savannah River	Catawba River
Threatened and Endangered Species			
Overall	22	26	9
Amphibians	0	2	0
Birds	2	4	1
Clams	1	1	1
Ferns and Allies	0	1	1
Fish	2	2	0
Flowering Plants	13	9	5
Lichens	1	0	0
Mammals	1	2	1
Reptiles	2	5	0
Migratory Birds	21	37	17

Tennessee

1. Description

The pipeline traverses mostly rural areas in eastern and middle Tennessee, with the exception of the metropolitan areas of Nashville, Knoxville and Chattanooga. Eastern Tennessee (near Knoxville and Chattanooga) is characterized by mountains and rugged terrain. Middle Tennessee consists of more agricultural land use. The pipeline crosses two major rivers within Tennessee (the Cumberland River and the Tennessee River), as well as a number of smaller rivers and creeks. Several lakes and waterways are also located within the one-mile corridor of the pipeline.

2. Water Intakes

Oil may become entrained in water intake structures, causing extensive and expensive damage, and possible harm if the material is flammable or explosive. All precautions should be taken to prevent such materials from entering water intakes in the event of a spill in the vicinity of a water intake in which case the point of contact should be notified immediately. Water intake locations are presented in Section 09.06.00 of this plan.

3. Access

The environmentally sensitive inland areas are generally accessible by vehicle or on foot. The sensitive areas along the rivers (i.e., within approximately 75 miles downgradient from the Tennessee and Cumberland River crossings) are generally accessible by boat and vehicle.

4. Sensitive Inland Areas

Within the Tennessee inland area, Standifer Marsh, Prentis Cooper State Park and Wildlife Management area, Enterprise South Nature Park, and two water intake facilities ([redacted] as well as several lakes and rivers, are environmentally sensitive and a priority for protection and cleanup measures. A listing of the sensitive inland areas in Tennessee are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Tennessee Sensitive Areas (Inland Areas)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-01	BORDEAUX GARDENS PARK	NASH-24	NASHVILLE PARKS AND RECREATION 615-862-8400
TN-02	RICHLAND PARK	NASH-24	(615) 862-5870
TN-03	WEST PARK	NASH-24	(615) 862-8400
TN-04	ENGLAND PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-05	GEN CLINT FISK PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-06	TED RHODES GOLF COURSE	NASH-24	(615) 862-8463
TN-07	ELIZABETH PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-08	BUENA VISTA PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-09	DAVIDSON DISTRICT II RECREATION AREA	NASH-24	(615) 862-8429
TN-10	HARTMAN PARK	NASH-24	(615) 862-8479
TN-11	HAYNES PARK	NASH-24	--
TN-12	CUMBERLAND RIVER GREENWAY	NASH-24	NASHVILLE GREENWAYS COMMISSION (615) 862-8400
TN-13	MORGAN PARK TRAILHEAD	NASH-24	NASHVILLE PARKS AND RECREATION (615) 862-8462
TN-14	BUFFALO PARK	NASH-24	--
TN-15	MCFERRIN PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-16	CLEVELAND PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-17	LOCK ONE PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-18	DOUGLAS PARK	NASH-24	--
TN-19	RIVERFRONT PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-20	KIRKPATRICK PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-21	EAST PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-22	SHELBY WALK PARK	NASH-23	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-23	LOCKELAND SPRINGS	NASH-23	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-24	SHELBY DOG PARK	NASH-23	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-25	SEVIER LAKE/SHELBY PARK	NASH-23	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-26	SHELBY GOLF COURSE	NASH-23	(615) 862-8474
TN-27	SHELBY BOTTOMS	NASH-23	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-28	MUSIC CITY BIKEWAY	NASH-23	(615) 880-1678
TN-29	VINNY LAKES GOLF COURSE	NASH-23	(615) 880-1720
TN-30	NAPIER PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 256-4474
TN-31	DUDLEY PARK	NASH-24	(615) 862-8405
TN-32	SOUTH PARK	NASH-24	--
TN-33	GREAT LAWN	NASH-24	--
TN-34	NASHVILLE MUSIC GARDEN/CITY WALK OF FAME PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-35	FIRST GREEN	NASH-24	--
TN-36	FORT NEGLEY PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-37	CUMBERLAND PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-38	RIVER LAWN AND LANDING	NASH-24	--
TN-39	METRO RIVERFRONT PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-40	BICENTENNIAL PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-41	PUBLIC SQUARE PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-42	VICTORY PARK	NASH-24	--
TN-43	LEGISLATIVE PLAZA	NASH-24	--
TN-44	MONROE PARK	NASH-24	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400
TN-45	NASHVILLE INTERNATIONAL AIRPORT	NASH-23	(615) 275-1675
TN-46	PRIEST LAKE	NASH-21	N/A = PHYSICAL FEATURE
TN-47	NASHBORO GOLF CLUB	NASH-22	(615) 367-2311
TN-48	CANE RIDGE PARK	NASH-20	METROPOLITAN BOARD OF PARKS AND RECREATION (615) 862-8400

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-49	BLUE WATER LAKE	NASH-20	N/A = PHYSICAL FEATURE
TN-50	BARFIELD CRESCENT PARK	NASH-18	MURFREESBORO PARKS AND RECREATION (615) 890-5333
TN-51	SKYMOUNT LAKE 4	NASH-11	N/A = PHYSICAL FEATURE
TN-52	SKYMOUNT SCOUT RESERVATION AND 2 LAKES	NASH-10	N/A = PHYSICAL FEATURE
TN-53	EAGLE LAKE	NASH-8	N/A = PHYSICAL FEATURE
TN-54	BIG CREEK LAKE	NASH-8	N/A = PHYSICAL FEATURE
TN-55	8 LAKES	NASH-8	N/A = PHYSICAL FEATURE
TN-56	SEQUATCHIE RIVER	NASH-6	N/A = PHYSICAL FEATURE
TN-57	CROSSROADS PARK	NASH-5	--
TN-58	DAVIS LAKE	NASH-5	N/A = PHYSICAL FEATURE
TN-59	PRENTIS COOPER STATE PARK AND WMA	NASH-5	TN DEPARTMENT OF AGRICULTURE (423) 658-5551
TN-60	TENNESSEE RIVER	NASH-4	N/A = PHYSICAL FEATURE
TN-61	SIGNAL POINT PARK	NASH-3	NATIONAL PARK SERVICE (706) 866-9241
TN-62	STRINGERS RIDGE PRESERVATION	NASH-3	CITY OF CHATTANOOGA PARKS (423) 425-6311
TN-63	WILLIAMS ISLAND STATE ARCHAEOLOGICAL PARK	NASH-3	--
TN-64	MOCCASIN BEND GOLF CLUB	NASH-3	(423) 267-3565
TN-65	LOOKOUT CREEK	NASH-3	PIPELINE CROSSING
TN-66	REFLECTION RIDING ARBORETUM	NASH-3	REFLECTION RIDING ARBORETUM
TN-67	CHICKAMAUGA & CHATTANOOGA NATIONAL MILITARY PARK AND POINT PARK	NASH-3	NATIONAL PARK SERVICE (423) 821-1099
TN-68	ALTON PARK	NASH-3	--
TN-69	SOUTH CHICAMAUGA CREEK	KNOX-2	PIPELINE CROSSING
TN-70	CHATTANOOGA AUDUBON SOCIETY	CHATT-14	(423) 892-1499
TN-71	CAMP JORDON PARK	KNOX-2	(423) 463-4391
TN-72	CONCORD GOLF COURSE	KNOX-2	(423) 894-4536
TN-73	BRAINERD COMMUNITY PARK	KNOX-2	(423) 643-6311
TN-74	SOUTH CHICKAMAUGA CREEK GREENWAY	KNOX-2	CITY OF CHATTANOOGA PARKS (423) 425-6311
TN-75	SOUTH CHICKAMAUGA CREEK	KNOX-2	N/A = PHYSICAL FEATURE
TN-76	BRAINERD RECREATION COMPLEX	KNOX-2	(423) 425-3600
TN-77	BRAINERD GOLF COURSE	KNOX-2	(423) 855-2692

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-78	CHATTANOOGA AIRPORT	KNOX-2	(423) 855-2200
TN-79	POND AT VULCANS MATERIALS CO.	KNOX-2	N/A = PHYSICAL FEATURE
TN-80	HAMILTON MEMORIAL PARK	KNOX-2	(423) 894-4206
TN-81	TENNESSEE RAILROAD MUSEUM	KNOX-2	(423) 894-8028
TN-82	HICKORY VALLEY GOLF COURSE	KNOX-2	(423) 894-1576
TN-83	TYNER-EAST BRAINERD RECREATION	KNOX-2	(423) 855-2664
TN-84	REDOUBT SOCCER ASSOCIATION PARK	KNOX-2	(423) 899-4180
TN-85	STANDIFER GAP MARSH	KNOX-2	(423) 902-7427
TN-86	ENTERPRISE SOUTH NATURE PARK	KNOX-3	(423) 893-3500
TN-87	POND	KNOX-3	N/A = PHYSICAL FEATURE
TN-88	POND	KNOX-3	N/A = PHYSICAL FEATURE
TN-89	BETHEA POND	KNOX-4	N/A = PHYSICAL FEATURE
TN-90	TWO PONDS	KNOX-4	N/A = PHYSICAL FEATURE
TN-91	JOHNSTON PONDS	KNOX-4	N/A = PHYSICAL FEATURE
TN-92	POND	KNOX-5	N/A = PHYSICAL FEATURE
TN-93	BRYMER CREEK	KNOX-5	N/A = PHYSICAL FEATURE
TN-94	STONE LAKE	KNOX-5	N/A = PHYSICAL FEATURE
TN-95	SWAFFORD NURSERY INC.	KNOX-5	(423) 479-3362
TN-96	POND	KNOX-5	N/A = PHYSICAL FEATURE
TN-97	POND	KNOX-5	N/A = PHYSICAL FEATURE
TN-98	TWO PONDS	KNOX-6	N/A = PHYSICAL FEATURE
TN-99	THREE POND	KNOX-7	N/A = PHYSICAL FEATURE
TN-100	POND	KNOX-7	N/A = PHYSICAL FEATURE
TN-101	POND – EXTENSION OF HIWASSEE RIVER	KNOX-7	N/A = PHYSICAL FEATURE
TN-102	HIWASSEE RIVER CONFLUENCE AND PONDS OFF THE RIVER	KNOX-7	N/A = PHYSICAL FEATURE
TN-103	WETLAND AREA	KNOX-7	N/A = PHYSICAL FEATURE
TN-104	POND	KNOX-7	N/A = PHYSICAL FEATURE
TN-105	MOUSE CREEK NURSERY / NORTH MOUSE CREEK	KNOX-8	(423) 462-2666
TN-106	POND	KNOX-9	N/A = PHYSICAL FEATURE
TN-107	ATHENS REGIONAL PARK	KNOX-9	(423) 744-2704
TN-108	ATHENS CAMPGROUND AND PARK	KNOX-9	(423) 745-9199
TN-109	WEBB LAKE	KNOX-9	N/A = PHYSICAL FEATURE
TN-110	OVER-NITER RV PARK	KNOX-10	(423) 507-0069
TN-111	TENNESSEE COUNTRY CAMPGROUND	KNOX-11	(423) 568-2939

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-112	SWEETWATER FLEA MARKET	KNOX-11	(423) 337-3532
TN-113	POND	KNOX-11	N/A = PHYSICAL FEATURE
TN-114	KOA SWEETWATER CAMPGROUND	KNOX-11	(865) 213-3900
TN-115	POND	KNOX-13	N/A = PHYSICAL FEATURE
TN-116	POND	KNOX-13	N/A = PHYSICAL FEATURE
TN-117	FERGUSON'S FLYING CIRCUS AIRPORT	KNOX-13	(615) 458-3915
TN-118	EXPRESS RV PARK	KNOX-13	(865) 458-8599
TN-119	CITY OF LOUNDON PARKS AND RECREATION	KNOX-13	(865) 458-7525
TN-120	TENNESSEE RIVER	KNOX-15	N/A = PHYSICAL FEATURE
TN-121	MEADOW VIEW GREENHOUSE AND GARDENS	KNOX-16	(865) 986-7229
TN-122	POND	KNOX-16	N/A = PHYSICAL FEATURE
TN-123	MCFEE PARK	KNOX-16	(865) 966-7057
TN-124	FORT LOUDON LAKE (OFF TENNESSEE RIVER)	KNOX-16	N/A = PHYSICAL FEATURE
TN-125	FIRST UTILITY DISTRICT OF KNOX COUNTY WASTEWATER TREATMENT PLANT	KNOX-16	FIRST UTILITY DISTRICT (865) 966-9741
TN-126	INVERNESS GREENWAY	KNOX-16	–
TN-127	PUTT-PUTT GOLF AND GAMES	KNOX-17	(865) 675-5558
TN-128	DEAD HORSE LAKE AND ANOTHER POND	KNOX-18	N/A = PHYSICAL FEATURE
TN-129	TEN MILE CREEK GREENWAY PARK	KNOX-18	(865) 215-4311
TN-130	WALKERS SPRINGS PARK	KNOX-18	(865) 215-6600
TN-131	WEST HILLS PARK	KNOX-18	(865) 215-4311
TN-132	JOHN TARLETON PARK	KNOX-19	(865) 215-6600
TN-133	KNOX COUNTY RECREATIONAL DEPARTMENT	KNOX-19	(865) 215-6600
TN-134	TYSON PARK	KNOX-19	(865) 215-1413
TN-135	SKATE PARK	KNOX-19	(865) 361-5304
TN-136	LESLIE STREET PARK	KNOX-19	PERMANENTLY CLOSED
TN-137	WEST VIEW PARK	KNOX-19	(865) 215-4311
TN-138	MALCOLM MARTIN PARK	KNOX-19	(865) 919-5937
TN-139	DANNY MAYFIELD PARK	KNOX-19	(865) 215-4311
TN-140	THE HILL PARK	KNOX-19	UNIVERSITY OF TENNESSEE – AYRES HALL (865) 974-2225
TN-141	CIRCLE PARK	KNOX-19	UNIVERSITY OF TENNESSEE – MCCLUNG MUSEUM (865) 974-2225
TN-142	NEYLAND STADIUM	KNOX-19	UNIVERSITY OF TENNESSEE – NEYLAND STADIUM

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
			(865) 974-2225
TN-143	WORLD'S FAIR PARK LAWN	KNOX-19	(865) 215-1158
TN-144	BICENTENNIAL PARK	KNOX-19	--
TN-145	KRUTCH PARK	KNOX-19	(865) 215-4248
TN-146	CAL JOHNSON PARK	KNOX-19	(865) 522-3177
TN-147	HARRIET TUBMAN PARK	KNOX-19	(865) 215-4311
TN-148	MORNINGSIDE PARK	KNOX-19	(865) 215-1413
TN-149	DR. WALTER HARDY PARK	KNOX-19	(865) 215-4311
TN-150	MORNINGSIDE GREENWAY	KNOX-19	(865) 215-4311
TN-151	HAZEN HISTORICAL MUSEUM	KNOX-19	(865) 522-8661
TN-152	BECK CULTURAL EXCHANGE CENTER	KNOX-19	(865) 524-8461
TN-153	BABE RUTH PARK	KNOX-19	(865) 215-4311
TN-154	WES COURSE AT WILLIAMS CREEK	KNOX-19	(865) 546-5828
TN-155	KNOXVILLE DOWNTOWN ISLAND AIRPORT	KNOX-19	(865) 577-4461
TN-156	WILL SKELTON GREENWAY	KNOX-19	(865) 215-4311
TN-157	ISLAND HOME PARK	KNOX-19	(865) 215-1413
TN-158	MAYNARD GLEN PARK	KNOX-19	--
TN-159	MARY JAMES PARK	KNOX-19	CITY OF KNOXVILLE PARKS AND RECREATION (865) 215-4311
TN-160	MARY VESTAL PARK	KNOX-19	CITY OF KNOXVILLE PARKS AND RECREATION (865) 215-4311
TN-161	FORT DICKERSON PARK	KNOX-19	(865) 215-4311
TN-162	SHERRI PARKER LEE STADIUM AND REGAL SOCCER STADIUM	KNOX-19	SHERRI PARKER LEE STADIUM (865) 974-2977
TN-163	UT GARDENS	KNOX-19	(865) 974-6265
TN-164	KNOXVILLE UTILITIES BOARD (KUB) KUWAHEE WASTEWATER TREATMENT PLANT	KNOX-19	CUSTOMER SERVICE (865)524-2911
TN-165	TWO PONDS	KNOX-19	N/A = PHYSICAL FEATURE
TN-166	UNIVERSITY OF TENNESSEE – RECSPORTS COMPLEX	KNOX-19	(865) 974-5165
TN-167	CONFEDERATE MEMORIAL HALL	KNOX-19	(865) 993-3397
TN-168	WILLOW CREEK GOLF CLUB	KNOX-16	(865) 675-0100

5. Sensitive Areas along Rivers

The pipeline crosses two major rivers within Tennessee: the Cumberland River and the Tennessee River.

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

Along the Cumberland River, the Haynes Bottom WMA Hunting Grounds, Barkley WMA, Dyson Ditch Wildlife Refuge, Start of Pardue Pond Wildlife Refuge, a water treatment facility are environmentally sensitive and should be a priority for protection and cleanup measures. A listing of these and additional environmentally sensitive areas along the Cumberland River are provided in the table below. Additional details including geospatial information can also be found in Appendix B.

Tennessee Sensitive Areas (Cumberland River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-CR-01	START OF FOUR PARKS TO THE WEST (WEST RIVERFRONT, METRO RIVERFRONT, BICENTENNIAL, PUBLIC SQUARE, AND RIVERFRONT) AND TWO PARKS (CUMBERLAND, RIVER LAWN AND LANDING) AND EAST BANK GREENWAY TO THE EAST	NASH-24	CITY OF NASHVILLE PARKS AND RECREATION (615) 862-8400
TN-CR-02	CUMBERLAND RIVER GREENWAY	NASH-24	CITY OF NASHVILLE PARKS AND RECREATION (615) 862-8400
TN-CR-03	LOCK ONE PARK TO THE NORTH	NASH-24	CITY OF NASHVILLE PARKS AND RECREATION (615) 862-8400
TN-CR-04	TED RHODES GOLF COURSE TO THE EAST	NASH-24	(615) 862-8463
TN-CR-05	ROBERTSON ISLAND	NASH-25	N/A = PHYSICAL FEATURE
TN-CR-06	ROCK HARBOR MARINE TO THE EAST	NASH-25	(615) 356-1111
TN-CR-07	BELLS BEND PARK TO THE NORTH	NASH-25	CITY OF NASHVILLE PARKS AND RECREATION (615) 862-8400
TN-CR-08	GOWER ISLAND	NASH-25	N/A = PHYSICAL FEATURE
TN-CR-09	BULL RUN RECREATIONAL PARK	NASH-25	ASHLAND CITY PARKS AND RECREATION (615) 792-4211
TN-CR-10	HARPETH SHOALS MARINA ENTRANCE TO THE CUMBERLAND RIVER AND CONFLUENCE OF COBB HOLLOW CREEK	NASH-25B	(615) 792-6852
TN-CR-11	CONFLUENCE OF SYCAMORE CREEK	N/A	N/A = PHYSICAL FEATURE
TN-CR-12	START OF DYSON DITCH WILDLIFE REFUGE (NORTH SIDE)	N/A	TENNESSEE WILDLIFE RESOURCES AGENCY (615) 792-4510

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-CR-13	START OF PARDUE POND WILDLIFE REFUGE (SOUTH SIDE)	N/A	TENNESSEE WILDLIFE RESOURCES AGENCY (615) 792-4510
TN-CR-14	START OF CUMBERLAND RIVER BICENTENNIAL TRAIL	N/A	ASHLAND CITY PARKS AND RECREATION (615) 792-2655
TN-CR-15	CHEATHAM DAM	N/A	USACOE (615) 792-5697
TN-CR-16	CLARKSVILLE MARINA	N/A	(931) 645-7476/(931) 444-0646
TN-CR-17	MCGREGOR PARK	N/A	CITY OF CLARKSVILLE PARKS AND RECREATION (931) 645-7476
TN-CR-18	NEW PROVIDENCE RECREATION AREA	N/A	CITY OF CLARKSVILLE PARKS AND RECREATION (931) 645-7476
TN-CR-19	SMITH BRANCH RECREATION AREA	N/A	--
TN-CR-20	HAYNES BOTTOM WMA HUNTING GROUNDS	N/A	TENNESSEE WILDLIFE RESOURCES AGENCY (615) 781-6500
TN-CR-21	GUICES CREEK RECREATION AREA	N/A	--
TN-CR-22	RIVER BEND RECREATION AREA	N/A	--
TN-CR-23	CROSS CREEKS NATIONAL WILDLIFE REFUGE	N/A	UNITED STATES FISH AND WILDLIFE SERVICE (931) 232-7477
TN-CR-24	LICK CREEK RECREATION AREA AND BOAT RAMP	N/A	TOWN OF DOVER PARKS DEPARTMENT (931) 232-5907
TN-CR-25	FORT DONELSON NATIONAL BATTLEFIELD	N/A	UNITED STATES NATIONAL PARK SERVICE (931) 232-5706
TN-CR-26	BARKLEY WMA	N/A	(731) 593-0588
TN-CR-27	LAND BETWEEN THE LAKES RECREATION AREA	N/A	(800) 525-7077
TN-CR-28	BLUE CREEK RECREATION AREA AND BOAT RAMP	N/A	USACOE (270) 362-4236
TN-CR-29	BEAR CREEK WATERFOWL MANAGEMENT UNIT	N/A	TENNESSEE WILDLIFE RESOURCE AGENCY (931) 232-7724
TN-CR-30	BUMPUS MILLS RECREATION AREA	N/A	USACOE (270) 362-4236
TN-CR-31	TOBACCOPORT PUBLIC USE AREA	N/A	--
TN-CR-32	LINTON PUBLIC USE AREA AND BOAT RAMP	N/A	USACOE (270) 362-4236

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-CR-33	DONALDSON CREEK PUBLIC USE AREA	N/A	--
TN-CR-34	CALHOUN HILL PUBLIC USE AREA	N/A	--
TN-CR-35	PRIZER POINT PUBLIC USE AREA, MARINA, AND BOAT RAMP	N/A	(270) 522-3762
TN-CR-36	HURRICANE CREEK RECREATION AND BOAT RAMP	N/A	USACOE (270) 522-8821
TN-CR-37	CANNON SPRING PUBLIC USE AREA	N/A	--
TN-CR-38	EDDY CREEK RECREATIONAL AREA	N/A	(270) 388-2271
TN-CR-39	MINERAL MOUNDS STATE PARK	N/A	KENTUCKY STATE PARKS (270) 388-3673
TN-CR-40	MINERAL MOUNDS GOLF COURSE	N/A	KENTUCKY STATE PARKS (270) 388-3673
TN-CR-41	KUTTAWA HARBOR MARINA	N/A	(270) 388-9563
TN-CR-42	VISTA RIDGE PARK	N/A	LYON COUNTY PARKS DEPARTMENT (270) 388-4769
TN-CR-43	BUZZARD ROCK RESORT, MARINA, AND BOAT RAMP	N/A	(270) 388-7925
TN-CR-44	NICKELL POINT RECREATION AREA AND BOAT RAMP	N/A	--
TN-CR-45	CANAL PUBLIC USE AREA	N/A	--
TN-CR-46	GREEN TURTLE BAY MARINA	N/A	(800) 498-0428
TN-CR-47	EUREKA RECREATION AREA AND BOAT RAMP	N/A	(270) 388-9459
TN-CR-48	COMMUNITY BOAT SLIPS AND RAMP	N/A	--
TN-CR-49	UNIDENTIFIED WATER TREATMENT PLANT	N/A	--
TN-CR-50	COMMUNITY BOAT RAMP	N/A	--
TN-CR-51	INDIAN POINT BOAT RAMP	N/A	--
TN-CR-52	EDDY CREEK MARINA RESORT	N/A	(270) 388-2271
TN-CR-53	BARKLEY STATE LODGE AND MARINA	N/A	--
TN-CR-54	SALINE CREEK BOAT RAMP	N/A	--
TN-CR-55	GATLIN POINT BOAT RAMP	N/A	--

The pipeline crosses the Tennessee River at three locations and traverses both Tennessee and Alabama. Along the Tennessee River, six water treatment facilities, six wildlife refuges (Maclellan Sanctuary on Audubon Island; Hiwassee Wildlife Refuge, Zieglers Island Wildlife Refuge; Blythe Ferry Goose Management Area, North Sauty Wildlife Refuge, and Whites Creek Small Wildlife Area); three WMAs (Paint Rock WMA, Long Island WMA, and Cotton Port WMA), and two archaeological parks

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

(Moccasin Bend and Williams Island) are environmentally sensitive and should be a priority for protection and cleanup measures. A listing of these and additional environmentally sensitive areas along the Tennessee River are provided in the table below. Additional details including geospatial information can also be found in Appendix B.

Tennessee Sensitive Areas (Tennessee River – 3 Sections)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-TR-01	THIRD CREEK GREENWAY	KNOX-19	UNIVERSITY OF TENNESSEE DEPARTMENT OF GARDENS (865) 974-8265
TN-TR-02	SEQUOYAH GREENWAY	KNOX-19	--
TN-TR-03	SEQUOYAH PARK	KNOX-19	--
TN-TR-04	LAKESHORE PARK	KNOX-19	--
TN-TR-05	LAKESHORE BALLPARK – RIVER FIELDS	KNOX-19	--
TN-TR-06	KUB FOURTH CREEK WASTEWATER TREATMENT PLANT	KNOX-19	(865) 524-2911
TN-TR-07	UNIVERSITY OF TENNESSEE FARM	KNOX-19	--
TN-TR-08	I.C. KING PARK	KNOX-19	(865) 215-6600
TN-TR-09	TENNESSEE RIVER CONFLUENCE WITH LITTLE RIVER	KNOX-19	N/A = PHYSICAL FEATURE
TN-TR-10	KELLER BEND PARK	KNOX-18A	--
TN-TR-11	LOUISVILLE POINT PARK	KNOX-18A	CITY OF LOUISVILLE PARKS AND RECREATION (865) 983-8831
TN-TR-12	LOUISVILLE LANDING MARINA	KNOX-18A	(865) 984-9001
TN-TR-13	CARL COWAN PARK	KNOX-18A	--
TN-TR-14	ADMIRAL FARRAGUT PARK	KNOX-18A	(865) 215-6600
TN-TR-15	CONCORD YACHT CLUB AND CONCORD PARK	KNOX-16	(865) 671-1210
TN-TR-16	POLAND CREEK CAMPGROUND / POLAND RECREATION AREA	KNOX-18A	(865) 257-6255
TN-TR-17	ANCHOR PARK	KNOX-16	--
TN-TR-18	TURKEY CREEK GREENWAY	KNOX-16	--
TN-TR-19	CONCORD MARINA AND CONCORD PARK	KNOX-16	(865) 966-5831
TN-TR-20	CHOTO MARINA	KNOX-16	(865) 966-5472
TN-TR-21	YARBERRY PENINSULA RECREATION AREA	KNOX-16	(865) 986-3993
TN-TR-22	FORT LOUDON MARINA	KNOX-16	(865) 986-5536
TN-TR-23	POTENTIAL WASTEWATER TREATMENT FACILITY	KNOX-15	--

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-TR-24	TELLICO DAM RECREATION AREA	KNOX-16	(800) 882-5263
TN-TR-25	POTENTIAL WASTEWATER TREATMENT FACILITY	KNOX-14	--
TN-TR-26	LOUDON MARINE PARK	KNOX-14	--
TN-TR-27	POTENTIAL WASTEWATER TREATMENT FACILITY	KNOX-15	POTENTIALLY LOUDON UTILITIES BOARD
TN-TR-28	INTERSECTS WITH PIPELINE IN LOUDON, TENNESSEE	KNOX-15	N/A = PHYSICAL FEATURE
TN-TR-29	RIVERVIEW GOLF COURSE	KNOX-15	(865) 986-6972
TN-TR-30	TENNESSEE NATIONAL GOLF CLUB	KNOX-13A	(865) 657-2001
TN-TR-31	PAINT ROCK WMA	KNOX-13A	(423) 693-6791
TN-TR-32	LONG ISLAND WMA	KNOX-13A	(423) 693-6791
TN-TR-33	LAKESIDE GOLF COURSE	KNOX-13A	(845) 735-2094
TN-TR-34	SOUTHWEST POINT GOLF COURSE	KNOX-13B	(865) 376-5282
TN-TR-35	SOUTHWEST POINT PARK	KNOX-13B	CITY OF KINGSTON PARKS (865) 376-1356
TN-TR-36	CONFLUENCE WITH CLINCH RIVER/WHITEOAK LAKE	N/A	N/A = PHYSICAL FEATURE
TN-TR-37	KINGSTON WATERFRONT PARK	KNOX-13B	--
TN-TR-38	KINGSTON CITY PARK	N/A	CITY OF KINGSTON PARKS AND RECREATION (865) 376-9476
TN-TR-39	ROANE COUNTY PARK/CANEY CREEK RV RESORT / POTENTIAL MARINA	KNOX-13B	(865) 882-2640 (PARK); (865) 882-4042 (RV RESORT)
TN-TR-40	ROCKWOOD COMMUNITY PARK/ DR. TOM FULLER MEMORIAL PARK	KNOX-13C	ROCKWOOD CITY PARKS (865) 354-0434
TN-TR-41	BAYSIDE MARINA	KNOX-13C	(718) 229-0097
TN-TR-42	BLUE SPRING MARINA	KNOX-13D	(865) 376-7298
TN-TR-43	UNNAMED MARINA	N/A	--
TN-TR-44	WHITES CREEK SMALL WILDLIFE AREA	N/A	--
TN-TR-45	ARROWHEAD RESORT, CAMPGROUND AND MARINA	KNOX-13D	MIKE BENNETT (423) 365-6484
TN-TR-46	TERRACE VIEW MARINA	KNOX-13D	(423) 365-6060
TN-TR-47	CEP EDEN MARINA	KNOX-13D	(423) 365-6929
TN-TR-48	HORNSBY HOLLOW RECREATION AREA	KNOX-13D	--
TN-TR-49	CAMPGROUND ON THE LAKESHORE	KNOX-13D	(423) 334-1490
TN-TR-50	BIG SPRINGS ACCESS AREA	KNOX-13D	--

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-TR-51	HORNSBY HOLLOW CAMPGROUND	KNOX-13D	(423) 334-1709
TN-TR-52	EUCHEE MARINA	KNOX-13D	(423) 334-1004
TN-TR-53	SAM'S BOAT DECK	KNOX-13D	(423) 334-5620
TN-TR-54	FOSHEE PASS RECREATION AREA	KNOX-13E	MEIGS COUNTY RECREATION (423) 334-4842
TN-TR-55	RHEA SPRINGS RECREATION AREA	KNOX-13E	(423) 775-7801
TN-TR-56	SPRING CITY PARK	KNOX-13E	TOWN OF SPRING CITY PARK AND RECREATION (423) 365-6441
TN-TR-57	POTENTIAL MARINA	KNOX-13E	--
TN-TR-58	CEDAR POINT RV PARK AND CABINS	KNOX-13E	(423) 322-6490
TN-TR-59	MEIGS COUNTY PARK	KNOX-13E	--
TN-TR-60	WATTS BAR DAM	KNOX-13F	--
TN-TR-61	COTTON PORT WMA	KNOX-9A	(423) 365-9166
TN-TR-62	COTTON PORT LANDING	KNOX-9A	--
TN-TR-63	ARMSTRONG FERRY RECREATION AREA	KNOX-9A	MEIGS COUNTY RECREATION (423) 334-3584
TN-TR-64	BLUE WATER RV RESORT AND MARINA	KNOX-9A	(423) 775-3265
TN-TR-65	ZIEGLERS ISLAND WILDLIFE REFUGE	KNOX-9A	--
TN-TR-66	HIWASSEE WILDLIFE REFUGE	KNOX-9A	(423) 614-3018
TN-TR-67	BLYTHE FERRY GOOSE MANAGEMENT AREA	KNOX-9A	--
TN-TR-68	CONFLUENCE WITH HIWASSEE ISLAND	KNOX-9A	--
TN-TR-69	BEAR BRANCH ACCESS AREA	KNOX-9B	--
TN-TR-70	SALE CREEK RECREATION AREA	KNOX-7B	(423) 332-8468
TN-TR-71	SALE CREEK MARINA	KNOX-7B	(423) 332-6312
TN-TR-72	GRASSHOPPER CREEK RECREATION AREA	KNOX-7B	(423) 961-2055
TN-TR-73	POSSUM CREEK RV PARK AND CAMPGROUND	KNOX-7B	(423) 332-8468
TN-TR-74	POSSUM CREEK RECREATION AREA AND POTENTIAL MARINA	KNOX-7B	--
TN-TR-75	PINE HARBOR MARINA	KNOX-7C	(423) 332-3963
TN-TR-76	FORREST COVE MARINA	KNOX-7B	--
TN-TR-77	MISTY HARBOR MARINA	KNOX-7B	(423) 595-1388
TN-TR-78	SKULL ISLAND RECREATION AREA	KNOX-3A	(423) 344-7722

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-TR-79	BEAR TRACE GOLF COURSE / HARRISON BAY STATE PARK	KNOX-3A	(423) 326-0885
TN-TR-80	HARRISON BAY STATE PARK AND CAMPGROUND	KNOX-3B	TENNESSEE STATE PARKS (423) 344-6214
TN-TR-81	HAMILTON COUNTY PARK	KNOX-3B	HAMILTON COUNTY PARKS AND RECREATION (423) 842-0177
TN-TR-82	CHESTER FROST PARK	KNOX-3B	HAMILTON COUNTY PARKS AND RECREATION (423) 842-0177
TN-TR-83	BASS BAY MARINA	KNOX-3A	(731) 593-3239
TN-TR-84	CAMP DIXIE (CAMPGROUND)	KNOX-3B	(423) 400-0390
TN-TR-85	CAMP COLUMBUS (CAMPGROUND)	KNOX-3B	(423) 842-7011
TN-TR-86	POTENTIAL MARINA – NOT NAMED	KNOX-3A	–
TN-TR-87	WOLFTEVER CREEK BOAT RAMP	KNOX-3A	–
TN-TR-88	ISLAND COVE MARINA AND RESORT	KNOX-3B	(423) 344-8331
TN-TR-89	CAMP JOY (CAMPGROUND)	KNOX-3A	(931) 273-5850
TN-TR-90	CHATTANOOGA YACHT CLUB	KNOX-2	(423) 344-6033
TN-TR-91	EAGLE BLUFF GOLF CLUB	KNOX-3B	(423) 326-0202
TN-TR-92	HIXSON MARINA / BIG RIDGE YACHT CLUB	KNOX-3B	(423) 843-3243 (BIG RIDGE)
TN-TR-93	PRIVATEER YACHT CLUB	KNOX-2	(423) 877-9411
TN-TR-94	BOOKER T WASHINGTON STATE PARK	KNOX-2	TENNESSEE STATE PARKS (423) 894-4955
TN-TR-95	GOLD POINT YACHT HARBOR	KNOX-2	(423) 622-1978
TN-TR-96	CHICKAMAUGA MARINA	KNOX-2	(423) 622-8919
TN-TR-97	MARINA POINT	KNOX-2	(423) 877-3773
TN-TR-98	TENNESSEE RIVERWALK (A GREENWAY)	KNOX-2	HAMILTON COUNTY PARKS AND RECREATION (423) 643-6086 OR (423) 842-0177
TN-TR-99	TENNESSEE RIVER PARK AND HAMILTON COUNTY RIVER PARK	KNOX-2	HAMILTON COUNTY PARKS AND RECREATION (423) 842-0177
TN-TR-100	DUPONT PARK AND NORTH RIVER SOCCER COMPLEX	NASH-3	(423) 425-8311 (DUPONT PARK); (423) 505-9451 (SOCCER COMPLEX)
TN-TR-101	LUPTON CITY GOLF CLUB, CHAMPIONS TENNIS CLUB, AND BASEBALL FIELDS	NASH-3	(423) 364-6947
TN-TR-102	SOUTH CHICKAMAUGA CREEK CONFLUENCE	NASH-3	N/A = PHYSICAL FEATURE

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
TN-TR-103	CHATTANOOGA GOLF AND COUNTRY CLUB	NASH-3	(423) 266-6178
TN-TR-104	MACLELLAN SANCTUARY ON AUDUBON ISLAND	NASH-3	(423) 892-1499
TN-TR-105	HUNTER MUSEUM OF AMERICAN ART	NASH-3	(423) 267-0968
TN-TR-106	COOLRIDGE PARK	NASH-3	CHATTANOOGA DEPARTMENT OF PARKS (423) 643-5956
TN-TR-107	RENAISSANCE PARK	NASH-3	CHATTANOOGA DEPARTMENT OF PARKS (423) 643-6311
TN-TR-108	MOCCASIN BEND GOLF COURSE	NASH-3	(423) 267-3585
TN-TR-109	MOCCASIN BEND NATIONAL ARCHAEOLOGICAL DISTRICT	NASH-3	NATIONAL PARK SERVICE (706) 866-9241
TN-TR-110	MOCCASIN BEND ARCHAEOLOGICAL DISTRICT / INTERSECTS PIPELINE ON TENNESSEE RIVER	NASH-3	NATIONAL PARK SERVICE (706) 866-9241
TN-TR-111	CONFLUENCE WITH LOOKOUT CREEK	NASH-3	N/A = PHYSICAL FEATURE
TN-TR-112	BROWN'S FERRY MARINA	NASH-3	(423) 821-8700
TN-TR-113	CHATTANOOGA SEWER TREATMENT PLANT	NASH-3	CHATTANOOGA PUBLIC WORKS (423) 757-5026
TN-TR-114	WILLIAMS ISLAND ARCHAEOLOGICAL PARK	NASH-3	--
TN-TR-115	MOCCASIN BEND NATIONAL ARCHEOLOGICAL DISTRICT	NASH-3	NATIONAL PARK SERVICE (706) 866-9241
TN-TR-116	PRENTICE COOPER PRIMITIVE CAMPSITE	NASH-4	--
TN-TR-117	HALES BAR MARINA AND RESORT	NASH-4	(423) 942-9000
TN-TR-118	MARION COUNTY PARK	NASH-6A	(423) 942-6653
TN-TR-119	RUNNING WATER PUBLIC USE AREA	NASH-6A	--
TN-TR-120	SHELLMOND CAMPGROUND AND BOAT RAMP	NASH-6A	(423) 942-9857
TN-TR-121	MAPLE VIEW PUBLIC USE AREA	N/A	(615) 781-6534
TN-TR-122	NICKAJACK LOCK	NASH-6A	USACOE (423) 942-3985
TN-TR-123	SOUTH PITTSBURG MUNICIPAL PARK	NASH-6B	CITY OF SOUTH PITTSBURG PARKS AND RECREATION (423) 228-3186
TN-TR-124	CITY OF SOUTH PITTSBURG WASTEWATER TREATMENT PLANT	NASH-6B	SOUTH PITTSBURG BOARD OF WATER WORKS AND SEWERS (423) 837-7164

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-TR-01	BOAT RAMP	N/A	--
AL-TR-02	CROW CREEK CONFLUENCE	N/A	N/A = PHYSICAL FEATURE
AL-TR-03	RACCOON CREEK PUBLIC HUNTING AREA	N/A	ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES (334) 242-3465
AL-TR-04	MCNARY RESERVATION	N/A	--
AL-TR-05	SCOTTSBORO MUNICIPAL PARK	N/A	--
AL-TR-06	SCOTTSBORO WASTEWATER TREATMENT PLANT	N/A	(256) 574-4470
AL-TR-07	GOOSE POND RESORT, PLANTATION GOLF, AND MARINA	N/A	(256) 912-0592
AL-TR-08	NORTH SAUTY WILDLIFE REFUGE	N/A	ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES 334-242-3465
AL-TR-09	CAMP MARANATHA (CAMPGROUND)	N/A	(256) 574-4539
AL-TR-10	LANGSTON CITY PARK	N/A	--
AL-TR-11	BUCK'S POCKET STATE PARK	N/A	ALABAMA STATE PARKS (800) 252-7275
AL-TR-12	LITTLE MOUNTAIN MARINA AND CAMPING	N/A	(256) 582-1280
AL-TR-13	RIVER BEND MARINA	N/A	(256) 582-6857
AL-TR-14	MONSATO TRACT	N/A	--
AL-TR-15	POTENTIAL CAMPGROUND	N/A	--
AL-TR-16	LAKE GUNTERSVILLE STATE PARK	N/A	(256) 571-5440
AL-TR-17	SHORT CREEK CONFLUENCE	N/A	N/A = PHYSICAL FEATURE
AL-TR-18	MARSHALL COUNTY PARK	N/A	(256) 582-2193
AL-TR-19	POTENTIAL MARINA	N/A	--
AL-TR-20	GUNTERSVILLE EAST LAKE TREATMENT	N/A	GUNTERSVILLE WATER BOARD (256) 582-2144
AL-TR-21	LOCK/DAM	N/A	N/A = PHYSICAL FEATURE
AL-TR-22	GUNTERSVILLE MUNICIPAL PARK	N/A	CITY OF GUNTERSVILLE PARKS AND RECREATION (256) 571-7590
AL-TR-23	NORTH ALABAMA SAILING MARINA	N/A	(256) 486-3311
AL-TR-24	TOM JACKSON PARK	N/A	--
AL-TR-25	OGLETREE PARK	N/A	CITY OF GUNTERSVILLE PARKS AND RECREATION (256) 571-7590
AL-TR-26	DAVID CROCKETT VISIT LIONS CLUB PARK	N/A	--

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-TR-27	ALRED MARINA	N/A	(256) 582-4400
AL-TR-28	HONEYCOMB CAMPGROUND	N/A	(256) 582-9882
N/A = Not applicable			

It should be noted that, although the Cumberland and Tennessee Rivers are the only major rivers that the pipeline crosses, there are several other smaller rivers, creeks and ponded waters that are considered environmentally sensitive as well. Those rivers and creeks above a base flow of 10 cms as well as significant ponded waters (i.e., lakes, ponds, and reservoirs) are listed/highlighted in the above tables.

6. Threatened and Endangered Species

A summary of threatened and endangered species along the pipeline corridor in the inland areas of Tennessee and within approximately 75 miles downgradient of where the pipeline crosses the Cumberland and Tennessee Rivers is provided in the table below. Specific information on these threatened and endangered species as well as migratory birds and critical habitats in the area are provided in Appendix A.

Threatened and Endangered Species (Tennessee)

	Inland Tennessee	Cumberland River	Tennessee River
Threatened and Endangered Species			
Overall	41	23	66
Amphibians	0	0	1
Birds	0	1	0
Clams	17	14	32
Crustaceans	1	0	1
Ferns and Allies	1	0	1
Fish	5	0	9
Flowering Plants	10	5	12
Mammals	4	3	4
Reptiles	0	0	1
Snails	3	0	5
Migratory Birds	27	25	30

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

Georgia

1. Description

The pipeline traverses predominantly forested areas in the northern portion of Georgia to a mixture of forested and agricultural areas in the western and eastern portion of Georgia to predominantly agricultural areas in the southern portion of Georgia. The pipeline traverses a number of high density population areas (i.e., Atlanta, Americus, Albany, Fort Valley, and Macon) that are connected by more rural locations of the state. The pipeline traverses four major rivers within Georgia (the Chattahoochee River, Oconee River, Flint River, and Savannah River), as well as smaller rivers and creeks. Numerous lakes, ponds, and other waterways are also located within the one-mile corridor of the pipeline.

2. Water Intakes

Oil may become entrained in water intake structures, causing extensive and expensive damage, and possible harm if the material is flammable or explosive. All precautions should be taken to prevent such materials from entering water intakes in the event of a spill in the vicinity of a water intake in which case the point of contact should be notified immediately. Water intake locations are presented in Section 09.06.00 of this plan.

3. Access

The environmentally sensitive inland areas are generally accessible by vehicle or on foot. The sensitive areas along the rivers (i.e., within approximately 75 miles downgradient from the Chattahoochee, Oconee, Flint, and Savannah River crossings) are generally accessible by boat and vehicle.

4. Sensitive Inland Areas

Within the Georgia inland areas, three reservoirs (Bremen Reservoir, Bear Creek Reservoir, and City of East Point Reservoir) as well as several lakes and waterways (Oostanaula River, Armuchee Creek, Etowah River, Chattahoochee River, Flint River, Big Slough, North Oconee, Sope Creek, and Kinchafoonee Creek) are environmentally sensitive and a priority for protection and cleanup measures. A listing of the sensitive inland areas in Georgia are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Georgia Sensitive Areas (Inland Areas)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-01	LOOKOUT MOUNTAIN GOLF CLUB	NASH-2	(706) 820-0719
GA-02	LOOKOUT MOUNTAIN FAIRYLAND CLUB	NASH-2	(706) 820-1551
GA-03	ROSSVILLE RECREATIONAL AREA AND TWO PONDS	NASH-2	(423) 488-1999
GA-04	SIXTH CALVARY MUSEUM AND PARK	NASH-2	(706) 861-2860

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-05	JACK MATTOX BASEBALL PARK	CHATT-14	CATOOSA COUNTY PARKS AND RECREATION (706) 891-4199
GA-06	BOYNTON RECREATIONAL PARK	CHATT-14	(423) 762-3105
GA-07	POND	CHATT-14	N/A = PHYSICAL FEATURE
GA-08	JACKSON LAKE/PEAVINE CREEK	CHATT-13	N/A = PHYSICAL FEATURE
GA-09	CHATTAHOOCHEE NATIONAL FOREST (PIPELINE TRAVERSES APPROXIMATELY 20 MILES OF THE FOREST)	CHATT-12	UNITED STATES FOREST SERVICE (770) 297-3000
GA-10	CROSS CREEK CAMPGROUND	CHATT-11	(706) 746-6974
GA-11	ARROWHEAD LAKE, LOWER ARROWHEAD LAKE AND TWO MORE PONDS	CHATT-10	N/A = PHYSICAL FEATURE
GA-12	TURKEY MOUNTAIN LAKE	CHATT-10	N/A = PHYSICAL FEATURE
GA-13	TURKEY MOUNTAIN RECREATION AREA	CHATT-10	GEORGIA DEPARTMENT OF NATURAL RESOURCES (DNR) – WILDLIFE RESOURCES DIVISION
GA-14	JOHNSTON LAKE	CHATT-10A	(706) 802-5087
GA-15	OOSTANAULA RIVER	CHATT-9	N/A = PHYSICAL FEATURE
GA-16	ARMUCHEE CREEK	CHATT-9	N/A = PHYSICAL FEATURE
GA-17	UPDEGROVE LAKE	CHATT-9	N/A = PHYSICAL FEATURE
GA-18	ARMUCHEE PARK	CHATT-9	ROME-FLOYD PARKS AND RECREATION AUTHORITY (706) 291 0766
GA-19	ARMUCHEE CREEK AND OOSTANAULA RIVER CONFLUENCE	CHATT-8	N/A = PHYSICAL FEATURE
GA-20	HALLS LAKE	CHATT-8	N/A = PHYSICAL FEATURE
GA-21	ETOWAH RIVER	CHATT-7	N/A = PHYSICAL FEATURE
GA-22	JOE COWAN PARK	CHATT-6	CITY OF EUHARLEE PARKS AND RECREATION (770) 386-1542
GA-23	DRY CREEK MOUNTAIN BIKING TRAILS	CHATT-11	USDA FOREST SERVICE CONASAUGA RANGER DISTRICT (706) 695-6736
GA-24	BROWNS LAKE	CHATT-4	N/A = PHYSICAL FEATURE
GA-25	BURNT HICKORY PARK	CHATT-4	PAULDING COUNTY PARKS & RECREATION (770) 443-7540
GA-26	WOFFORD LAKE	CHATT-2	N/A = PHYSICAL FEATURE

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-27	FORT YARGO LAKE	CHATT-2	N/A = PHYSICAL FEATURE
GA-28	LOST MOUNTAIN PARK AND WARD RECREATION CENTER AND LOST MOUNTAIN SOFTBALL COMPLEX	CHATT-2	COBB COUNTY P.A.R.K.S. (770) 528-8885
GA-29	MUD CREEK SOCCER COMPLEX	CHATT-2	COBB COUNTY P.A.R.K.S. (404) 818-9221
GA-30	WILD HORSE CREEK PARK AND RON ANDERSON COMMUNITY CENTER	CHATT-2	COBB COUNTY P.A.R.K.S. (770) 528-8890
GA-31	EUHARLEE COVERED BRIDGE	CHATT-6	CITY OF EUHARLEE (770) 386-1542
GA-32	WEST LAKE	GA-2	N/A = PHYSICAL FEATURE
GA-33	BREMAN RESERVOIR	GA-2	N/A = PHYSICAL FEATURE
GA-34	BREMAN WATER TREATMENT PLANT	GA-2	(574) 546-3829
GA-35	BAXTER LAKE	GA-3	N/A = PHYSICAL FEATURE
GA-36	HATFIELD'S LAKE	GA-4	N/A = PHYSICAL FEATURE
GA-37	GARRET LAKE	GA-4	N/A = PHYSICAL FEATURE
GA-38	EULENFIELD LAKE	GA-4	N/A = PHYSICAL FEATURE
GA-39	WIGGINS LAKE	GA-4	N/A = PHYSICAL FEATURE
GA-40	FERMANDER LAKE	GA-5	N/A = PHYSICAL FEATURE
GA-41	TUMBLINS LAKE	GA-5	N/A = PHYSICAL FEATURE
GA-42	LEGION LAKE	GA-5	N/A = PHYSICAL FEATURE
GA-43	BALL PARK	GA-5	--
GA-44	THE FROG GOLF CLUB / COURSE	GA-5	(770) 459-4400
GA-45	RECREATIONAL POND	GA-5	N/A = PHYSICAL FEATURE
GA-46	ELLIS LAKE	GA-6	N/A = PHYSICAL FEATURE
GA-47	JONES LAKE	GA-6	N/A = PHYSICAL FEATURE
GA-48	PAULDING COUNTY GOLF COURSE / COUNTRY CLUB (AKA CREEKSIDE GOLF & COUNTRY CLUB)	GA-6	(770) 445-7655
GA-49	LAKE RAMONA	GA-6	N/A = PHYSICAL FEATURE
GA-50	UNNAMED POND/LAKE	GA-6	N/A = PHYSICAL FEATURE
GA-51	WILLIAMS LAKE	GA-6	N/A = PHYSICAL FEATURE
GA-52	POOLE'S MILL BRIDGE PARK	GA-6	(770) 781-2215
GA-53	TAYLOR FARM PARK	GA-7	PAULDING COUNTY PARKS AND RECREATION (770) 222-3270
GA-54	PINE VALLEY LAKE	GA-7	N/A = PHYSICAL FEATURE
GA-55	ROUNDTREE RECREATION COMPLEX	GA-6	(770) 443-1187
GA-56	POWDER SPRINGS PARK	GA-7	POWDER SPRINGS PARKS AND RECREATION

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
			770-528-8890
GA-57	AYRE/SOUTH AIRPORT	GA-4	(770) 948-1238
GA-58	THE LION GOLF CLUB	GA-2	(770) 537-7020
GA-59	CLARKDALE PARK	GA-7	COBB COUNTY P.A.R.K.S. (770) 528-8890
GA-60	SAVANNAH RIVER	GA-26	N/A = PHYSICAL FEATURE
GA-61	LAKE HARTWELL	GA-26	N/A = PHYSICAL FEATURE
GA-62	BIG OAKS RECREATION AREA	GA-26	HART COUNTY PARKS AND RECREATION (888) 893-0678
GA-63	WATSADLER CAMPGROUND	GA-26	USACOE (888) 893-0678
GA-64	MEMORIAL GARDEN OF PRAYER	GA-25	–
GA-65	BROAD RIVER	GA-23	N/A = PHYSICAL FEATURE
GA-66	LAKE CHAPMAN	GA-19	N/A = PHYSICAL FEATURE
GA-67	SANDY CREEK PARK	GA-19	(706) 613-3631
GA-68	NORTH OCONEE RIVER	GA-19	N/A = PHYSICAL FEATURE
GA-69	ATHENS-CLARKE COUNTY UNIFIED GREENWAYS AND RIVERSIDE PARKS	GA-18	706-613-3600
GA-70	SANDY CREEK NATURE CENTER	GA-18	(706) 613-3615
GA-71	HOLLAND SPORTS COMPLEX	GA-19	(706) 613-3604
GA-72	ATHENS COUNTRY CLUB	GA-18	(706) 354-7100
GA-73	MIDDLE OCONEE RIVER	GA-18	N/A = PHYSICAL FEATURE
GA-74	BEAR CREEK RESERVOIR	GA-17	UPPER OCONEE BASIN WATER AUTHORITY (706) 369-5650
GA-75	THE GEORGIA CLUB	GA-17	(770) 725-8101
GA-76	WATERSHED LAKE	GA-17	N/A = PHYSICAL FEATURE
GA-77	BARROW MEMORIAL GARDENS	GA-16	(770) 867-3290
GA-78	PINE HILLS GOLF COURSE	GA-16	(770) 867-3150
GA-79	THE CHIMNEYS GOLF COURSE	GA-16	(770) 307-4900
GA-80	WINDER-BARROW HIGH SCHOOL BASEBALL FIELDS	GA-16	(770) 867-4519
GA-81	NATURAL RESOURCES DEPARTMENT	GA-16	–
GA-82	FORT YARGO STATE PARK	GA-16	770-867-3489
GA-83	FORT YARGO LAKE	GA-16	N/A = PHYSICAL FEATURE
GA-84	BEACH AT FORT YARGO LAKE	GA-16	N/A = PHYSICAL FEATURE
GA-85	MARBURY LAKE	GA-15	N/A = PHYSICAL FEATURE
GA-86	CLUSTER OF SMALL PONDS	GA-15	N/A = PHYSICAL FEATURE
GA-87	FREEMAN'S MILL PARK	GA-14	GWINNETT COUNTY PARKS AND RECREATION (770) 822-8840

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-88	RHODES JORDAN PARK	GA-14	GWINNETT COUNTY PARKS AND RECREATION (770) 822-5414
GA-89	HARRIS LAKE	GA-13	N/A = PHYSICAL FEATURE
GA-90	CHADWICK LAKE	GA-13	N/A = PHYSICAL FEATURE
GA-91	THE GEORGIA TRAIL AT SUGARLOAD	GA-13	THE GEORGIA TRAIL (770) 497-4653
GA-92	MCDANIEL FARM PARK	GA-13	GWINNETT COUNTY PARKS AND RECREATION (770) 814-4920
GA-93	CARDINAL LAKE	GA-12	N/A = PHYSICAL FEATURE
GA-94	SHORTY HOWELL PARK	GA-12	GWINNETT COUNTY PARKS AND RECREATION (678) 277-0900
GA-95	MORRISON LAKE	GA-12	N/A = PHYSICAL FEATURE
GA-96	WEST GWINNETT PARK AND AQUATIC CENTER	GA-12	GWINNETT COUNTY PARKS AND RECREATION (678) 407-5801
GA-97	PINCKNEYVILLE PARK DOG PARK	GA-12	GWINNETT COUNTY PARKS AND RECREATION (678) 277-0920
GA-98	PINCKNEYVILLE PARK AND SOCCER COMPLEX	GA-12	GWINNETT COUNTY PARKS AND RECREATION (678) 277-0920
GA-99	CROWELL BROTHERS FUNERAL HOME	GA-12	(770) 448-5757
GA-100	NORTH ATLANTA MEMORIAL PARK	GA-11	(770) 604-1177
GA-101	WINDWOOD HOLLOW PARK	GA-11	CITY OF DUNWOODY (678) 382-6700
GA-102	KINGSLEY LAKE	GA-11	N/A = PHYSICAL FEATURE
GA-103	DUNWOODY COUNTRY CLUB	GA-11	(770) 394-4492
GA-104	MARCUS JEWISH COMMUNITY CENTER OF ATLANTA	GA-11	(678) 812-4000
GA-105	DUNWOODY NATURE CENTER	GA-11	(770) 394-3322
GA-106	DUNWOODY PARK	GA-11	(678) 382-6700
GA-107	BIG TREES FOREST PRESERVE	GA-11	(770) 673-0111
GA-108	MORGAN FALLS ATHLETIC FIELDS	GA-11	SANDY SPRINGS PARKS AND RECREATION (770) 730-5600
GA-109	STEEL CANYON GOLF CLUB	GA-11	(770) 390-0424
GA-110	CHEROKEE TOWN AND COUNTRY CLUB	GA-11	(770) 993-4407
GA-111	ORKIN LAKE	GA-10	N/A = PHYSICAL FEATURE
GA-112	MORGAN FALLS OVERLOOK PARK	GA-10	SANDY SPRINGS PARKS AND RECREATION (770) 730-5600

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-113	SANDY SPRINGS DOG PARK	GA-10	SANDY SPRINGS PARKS AND RECREATION (770) 730-5600
GA-114	ORIGINAL SHEA BUTTER HOUSE	GA-10	(404) 735-0533
GA-115	ABERNATHY GREENWAY	GA-10	SANDY SPRINGS PARKS AND RECREATION (770) 730-5600
GA-116	CHATTAHOOCHEE RIVER	GA-10	N/A = PHYSICAL FEATURE
GA-117	ABERNATHY PARK	GA-10	SANDY SPRINGS PARKS AND RECREATION (770) 730-5600
GA-118	GEORGIA STATE GOLF ASSOCIATION	GA-10	(770) 955-4272
GA-119	NORTH ATLANTA SOCCER COMPLEX	GA-10	(770) 955-8700
GA-120	MCFARLANE PARK	GA-10	NO PHONE NUMBER
GA-121	ATLANTA COUNTRY CLUB	GA-10	(770) 953-2100
GA-122	SOPE CREEK PARK	GA-10	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (678) 538-1200
GA-123	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA	GA-10	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (678) 538-1200
GA-124	CHATTAHOOCHEE NATIONAL RECREATION AREA	GA-10	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (678) 538-1200
GA-125	COCHRAN SHOALS-POWERS ISLAND	GA-10	(678) 538-1200
GA-126	CHATTAHOOCHEE RIVER RUN/BIKE PATH	GA-10	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (678) 538-1200
GA-127	RIVER PARK	GA-10	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (678) 538-1200
GA-128	CHATTAHOOCHEE NATIONAL RECREATION AREA : PACES MILL	GA-9	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (678) 538-1200
GA-129	JONQUIL PARK	GA-10	(770) 319-2501
GA-130	COUNTRY PARK	GA-10	(678) 305-0801
GA-131	TAYLOR BRAWNER PARK	N/A	(770) 431-2842

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ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-132	PACES FERRY PARK	GA-9	(770) 319-9333
GA-133	OAKDALE PARK	GA-9	(770) 240-2001
GA-134	RHYNE PARK	GA-8	(770) 801-5343
GA-135	LAUREL LAKE	GA-8	N/A = PHYSICAL FEATURE
GA-136	SILVER COMET TRAIL	GA-8	COBB COUNTY PARK RANGER (770) 528-8865
GA-137	NORTH COOPER LAKE PARK	GA-8	--
GA-138	COMMUNITY GARDEN	GA-8	COMMUNITY GARDENS PROGRAM (404) 546-6852
GA-139	HERITAGE PARK	GA-8	(770) 528-8810
GA-140	THOMPSON PARK	GA-8	COBB COUNTY P.A.R.K.S. (770) 819-3215
GA-141	HERITAGE PARK TRAIL	GA-8	(770) 528-8810
GA-142	ASKEW PARK	GA-8	CITY OF SMYRNA (678) 631-5394
GA-143	TOLLESON PARK	GA-8	CITY OF SMYRNA (770) 431-2844
GA-144	LAKE COURT PARK	GA-8	(770) 431-2842
GA-145	COBB COUNTY HURT ROAD PARK	GA-8	COBB COUNTY P.A.R.K.S. (770) 528-8810
GA-146	TRAMORE PARK	GA-8	COBB COUNTY P.A.R.K.S. (770) 528-8890
GA-147	LIONS PARK	GA-8	COBB COUNTY P.A.R.K.S. (770) 819-3231
GA-148	MT HARMONY MEMORIAL GARDENS	GA-8	(770) 948-3033
GA-149	TROLLEY LINE PARK	GA-9	COBB COUNTY P.A.R.K.S. (770) 528-8810
GA-150	PARK AT VININGS	GA-9	(770) 574-4313
GA-151	COBB COUNTY RECREATION	GA-9	(404) 696-6767
GA-152	CHATTAHOOCHEE TRAIL PARK	GA-9	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (678) 538-1200
GA-153	RIVERSIDE PARK	GA-9	ROSWELL PARKS AND RECREATION (770) 641-3705
GA-154	WHITTIER MILLS PARK	GA-9	CITY OF ATLANTA URBAN DESIGN COMMISSION (404) 330-6200
GA-155	CHATTAHOOCHEE PARK	GA-9	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (678) 538-1200

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ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-156	NICKAJACK PARK	GA-8	COBB COUNTY P.A.R.K.S. (770) 528-8810
GA-157	RIVERLINE PARK	GA-8	(770) 431-2842
GA-158	ATLANTA INDUSTRIAL PARK	GA-9	--
GA-159	ENGLISH PARK	GA-9	CITY OF ATLANTA, OFFICE OF RECREATION (404) 505-3116
GA-160	LILLIAN COOPER SHEPHERD PARK	GA-9	(404) 817-6744
GA-161	COLLIER PARK	GA-8	CITY OF ATLANTA, OFFICE OF RECREATION (404) 505-3157
GA-162	CORETTA SCOTT KING ACADEMY	GA-9	ATLANTA PUBLIC SCHOOLS (404) 802-4962
GA-163	UTOY BOULDER PARK	BAIN-3	CITY OF ATLANTA OFFICE OF PARKS (404) 546-6813
GA-164	WILSON MILL PARK	GA-8	CITY OF ATLANTA OFFICE OF PARKS (404) 817-6744
GA-165	ADAMSVILLE TRIANGLE	GA-8	N/A = PHYSICAL FEATURE
GA-166	ADAMSVILLE GYM PARK	GA-9	CITY OF ATLANTA OFFICE OF PARKS (404) 505-3181
GA-167	DOLLAR MILL MEDIAN	BAIN-3	N/A = PHYSICAL FEATURE
GA-168	WILDWOOD LAKE	BAIN-3	N/A = PHYSICAL FEATURE
GA-169	UTOY PARK	BAIN-3	--
GA-170	NISKEY LAKE	BAIN-3	N/A = PHYSICAL FEATURE
GA-171	MELVIN DRIVE PARK	BAIN-3	(404) 817-6744
GA-172	CITY OF EAST POINT RESERVOIR	BAIN-3	CITY OF EAST POINT WATER AND SEWER (404) 761-2179
GA-173	TUCSON TRAIL PARK	BAIN-3	CITY OF ATLANTA OFFICE OF PARKS (404) 817-6742
GA-174	BEN HILL PARK	BAIN-3	(404) 346-5891
GA-175	DEERWOOD PARK	BAIN-3	CITY OF ATLANTA OFFICE OF PARKS (404) 817-6744
GA-176	STEPHANIE DRIVE PARK	BAIN-3	(404) 546-6813
GA-177	COWART LAKE	BAIN-3	N/A = PHYSICAL FEATURE
GA-178	GEORGIA SOCCER PARK	BAIN-3	(404) 992-4925
GA-179	WELCOME ALL PARK	BAIN-3	(404) 612-4058
GA-180	HARRINGTON PARK	HART-6	(404) 684-0543
GA-181	BRANNON MEMORIAL PARK	HART-6	CITY OF COLLEGE PARK RECREATION DEPARTMENT (404) 669-3767

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ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-182	WORLD BOTANICAL GARDEN	HART-6	(678) 973-0611
GA-183	BRENNINGHAM PARK	HART-6	(404) 669-3776
GA-184	GORDON MORRIS MEMORIAL GOLF COURSE	HART-6	(404) 761-0731
GA-185	COLLEGE PARK GOLF COURSE	HART-6	(404) 761-0731
GA-186	BARRETT PARK	HART-6	CITY OF COLLEGE PARK (404) 669-3776
GA-187	JAMESTOWN PARK	HART-6	CITY OF COLLEGE PARK (404) 669-3767
GA-188	PETER PAN PARK	HART-6	CITY OF COLLEGE PARK (404) 669-3767
GA-189	BOYS AND GIRLS CLUB OF METRO ATLANTA	HART-6	(404) 527-7100
GA-190	EGAN PARK	HART-6	(800) 864-7275
GA-191	COFIELD PARK	HART-6	CITY OF HAPEVILLE, PARKS AND FACILITIES DIVISION (404) 669-2120
GA-192	WEST BOLLING PARK/TEACHING MUSEUM SOUTH	HART-6	FULTON COUNTY SCHOOLS (470) 254-8015
GA-193	WASHINGTON COMMUNITY PARK/ JESS LUCAS Y-TEEN PARK	HART-6	(404) 669-2120
GA-194	TOM E MORRIS SPORTS COMPLEX	HART-6	CITY OF HAPEVILLE, PARKS AND FACILITIES DIVISION (404) 669-2136
GA-195	CHATTAHOOCHEE RIVER	GA-9	N/A = PHYSICAL FEATURE
GA-196	NORTH FULTON GOLF COURSE	GA-9	(404) 255-0723
GA-197	CHASTAIN MEMORIAL PARK	GA-9	CITY OF ATLANTA PARKS AND RECREATION (404) 733-5012
GA-198	RIDGEVIEW PARK	GA-11	CITY OF SANDY SPRINGS (770) 730-5600
GA-199	YMCA SOCCER FIELDS/WINDSOR PARKWAY SOCCER COMPLEX	GA-11	METRO ATLANTA YMCA SOCCER 770-(423) 9622
GA-200	LYNNWOOD PARK	GA-11	BROOKHAVEN PARKS AND RECREATION (404) 637-0562
GA-201	SILVER LAKE	GA-11	N/A = PHYSICAL FEATURE
GA-202	BLACKBURN PARK	GA-11	BROOKHAVEN PARKS AND RECREATION (404) 637-0562
GA-203	KESWICK FOREST	GA-11	N/A = PHYSICAL FEATURE

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-204	MURPHEY CANDLER PARK	GA-11	BROOKHAVEN PARKS AND RECREATION (404) 637-0562
GA-205	HUNTLEY HILLS PARK	GA-11	CITY OF CHAMBLEE (770) 986 5016
GA-206	BERNARD HALPERN PARK	GA-11	DORAVILLE PARKS AND RECREATION (770) 936-3850
GA-207	CHICOPEE PARK	GA-11	DORAVILLE PARKS AND RECREATION (770) 936-3850
GA-208	FLOWERS PARK	GA-11	DORAVILLE PARKS AND RECREATION (770) 936-3850
GA-209	HONEYSUCKLE PARK	GA-11	DORAVILLE PARKS AND RECREATION (770) 936-3850
GA-210	CHATTAHOOCHEE RIVER	GA-10	N/A = PHYSICAL FEATURE
GA-211	HERBERT GREENE	BAIN-3	CITY OF ATLANTA OFFICE OF PARKS (404) 546-6813
GA-212	ROSE GARDEN PARK	GA-10	CITY OF SMYRNA (770) 431-2842
GA-213	MOUNT PARAN AND NORTHSIDE PARK	GA-10	CITY OF ATLANTA (404) 546-6813
GA-214	DOGWOOD GOLF CLUB	GA-7	(770) 941-2202
GA-215	SWEETWATER PARK	GA-7	GEORGIA STATE PARK (770) 732-5871
GA-216	LEGIONS PARK	GA-7	CITY OF AUSTELL PARKS AND RECREATION (770) 944-4309
GA-217	GEORGE BEAVES PARK	GA-7	CITY OF AUSTELL PARKS AND RECREATION (770) 944-4309
GA-218	COLLAR PARK	GA-7	CITY OF AUSTELL PARKS AND RECREATION (770) 944-4309
GA-219	LOUISE SUGGS MEMORIAL PARK	GA-7	CITY OF AUSTELL PARKS AND RECREATION (770) 944-4309
GA-220	ATLANTA WEST CAMPGROUND	GA-6	(770) 948-7302
GA-221	SWEETWATER CREEK	GA-6	N/A = PHYSICAL FEATURE
GA-222	GEORGE H SPARKS RESERVOIR	GA-7	GEORGIA STATE PARK (770) 732-5871
GA-223	SWEETWATER CREEK STATE PARK	GA-7	GEORGIA STATE PARK (770) 732-5871
GA-224	CHATTAHOOCHEE RIVER	BAIN-3	N/A = PHYSICAL FEATURE

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ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-225	WOLF CREEK GOLF COURSE	BAIN-3	(404) 344-1334
GA-226	LAKE FRANCES	BAIN-4	N/A = PHYSICAL FEATURE
GA-227	VALLEY LAKES	BAIN-4	N/A = PHYSICAL FEATURE
GA-228	CANINE CROSSING DOG PARK	BAIN-4	FULTON COUNTY (770) 306-3010
GA-229	FOREST LAWN MEMORIAL GARDENS	BAIN-4	(770) 964-7871
GA-230	SHANNON LAKE	BAIN-4	N/A = PHYSICAL FEATURE
GA-231	CLUSTER OF SMALL PONDS	BAIN-5	N/A = PHYSICAL FEATURE
GA-232	CLUSTER OF SMALL PONDS	BAIN-5	N/A = PHYSICAL FEATURE
GA-233	CLUSTER OF SMALL PONDS	BAIN-5	N/A = PHYSICAL FEATURE
GA-234	CLUSTER OF SMALL PONDS	BAIN-6	N/A = PHYSICAL FEATURE
GA-235	FUN JUNCTION USA	BAIN-6	FUN JUNCTION USA (770) 460-5862
GA-236	LINKS GOLF CLUB	BAIN-6	(770) 461-5100
GA-237	PANHANDLE PARK	BAIN-7	CLAYTON COUNTY PARKS AND RECREATION (770) 473-5730
GA-238	LAKE TWELVE OAKS	BAIN-7	N/A = PHYSICAL FEATURE
GA-239	LAKE TALMADGE	BAIN-7	N/A = PHYSICAL FEATURE
GA-240	CARIN CREEK GOLF COURSE	BAIN-9	(770) 227-9794
GA-241	PARKS LAKE	BAIN-9	N/A = PHYSICAL FEATURE
GA-242	CROUCH LAKE NUMBER TWO	BAIN-10	N/A = PHYSICAL FEATURE
GA-243	NORTH CRYSTAL LAKE	BAIN-10	N/A = PHYSICAL FEATURE
GA-244	BARNESVILLE RESERVOIR	BAIN-12	N/A = PHYSICAL FEATURE
GA-245	CHILDS POND	BAIN-12	N/A = PHYSICAL FEATURE
GA-246	FORSYTH GOLF COURSE	BAIN-13	(478) 994-5328
GA-247	MONROE COUNTY RECREATION DEPARTMENT	BAIN-13	(478) 994-7035
GA-248	EVERGREEN LAWN AND GARDEN	BAIN-15	(478) 992-8577
GA-249	LAMON LAKE	BAIN-15	N/A = PHYSICAL FEATURE
GA-250	LAKE WILDWOOD	BAIN-18	N/A = PHYSICAL FEATURE
GA-251	LAKE TOBESOFKEE RECREATION AREA	BAIN-18	(478) 474-8770
GA-252	CLAYSTONE PARK	BAIN-18	(478) 474-8770
GA-253	LAKE TOBESOFKEE	BAIN-18	(478) 474-8770
GA-254	FLINTROCK PARK	BAIN-18	--
GA-255	SIKES LAKE	BAIN-17	N/A = PHYSICAL FEATURE
GA-256	OAKVIEW GOLF COURSE	BAIN-17	(478) 785-1833
GA-257	TAYLORS POND	BAIN-21	N/A = PHYSICAL FEATURE
GA-258	SOUTH PEACH PARK	BAIN-21	(478) 825-3334
GA-259	MASSEE LANE GARDENS	BAIN-22	(478) 967-2358
GA-260	FLINT RIVER	BAIN-24	N/A = PHYSICAL FEATURE
GA-261	PIONEER FARM	BAIN-26	(229) 924-2558
GA-262	LAKE COLLINS	BAIN-28	N/A = PHYSICAL FEATURE

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ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-263	WELLS MILLPOND	BAIN-29	N/A = PHYSICAL FEATURE
GA-264	KINCHAFOONEE CREEK	BAIN-32	N/A = PHYSICAL FEATURE
GA-265	JAMES POND	BAIN-32	N/A = PHYSICAL FEATURE
GA-266	ROCK HOLE CREEK	BAIN-32	N/A = PHYSICAL FEATURE
GA-267	GRAND ISLAND	BAIN-32	(229) 678-0071
GA-268	LANSING PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-269	HAWTHORN PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-270	SHERWOOD PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-271	WEBB PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-272	WALDEN PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-273	EUGEMAR PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-274	BALDWIN PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-275	SHADOWLAWN PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-276	DELLWOOD PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-277	AVALON PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-278	WEST TOWN PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-279	WADDELL PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-280	GORDON SPORTS COMPLEX	BAIN-33	(229) 430-5254
GA-281	EVERGREEN PARK	BAIN-33	ALBANY PARKS AND RECREATION (912) 430-5222
GA-282	CLUSTER OF SMALL PONDS	BAIN-35	N/A = PHYSICAL FEATURE
GA-283	CLUSTER OF SMALL PONDS	BAIN-35	N/A = PHYSICAL FEATURE

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-284	FLINT RIVER	BAIN-36	N/A = PHYSICAL FEATURE
GA-285	ROCKY BEND FLINT RIVER RETREAT	BAIN-36	(229) 734-4109
GA-286	RIO PIEDRA PLANTATION	BAIN-36	(229) 336-1677
GA-287	PINES GOLF COURSE	BAIN-40	(229) 246-8545
GA-288	FOURMILE POND	BAIN-41	N/A = PHYSICAL FEATURE
GA-289	BIG SLOUGH (TRIBUTARY OF FLINT RIVER)	BAIN-41	N/A = PHYSICAL FEATURE
GA-290	BATEAU POND	BAIN-41	N/A = PHYSICAL FEATURE
GA-291	SOUTH WINDS PLANTATIONS	BAIN-41	(229) 246-8277
GA-292	TWIN LAKES	BAIN-41	N/A = PHYSICAL FEATURE

5. Sensitive Areas along Rivers

The pipeline crosses four major rivers within Georgia: Chattahoochee River, Savannah River, Flint River, and Oconee River.

Along the Chattahoochee River, the Chattahoochee River National Recreation Area (which is located along the river corridor for the metropolitan area of Atlanta), four wastewater treatment facilities and one water intake facility, and two wildlife management areas (Lakeside and Dixie Creek) are considered sensitive to oil spills and should be the first priority for protection and cleanup measures in the event of a spill. A listing of the sensitive areas along the Chattahoochee River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Georgia Sensitive Areas (Chattahoochee River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-CR-01	MORGAN FALLS RIVER PARK/SANDY SPRINGS DOG PARK	GA-10	CITY OF SANDY SPRINGS (770) 730-5600
GA-CR-02	CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA (CRNRA) - JOHNSON'S FERRY (HIKING AND BOAT RAMP)	GA-10	UNITED STATES NATIONAL PARK SERVICE (678) 538-1200
GA-CR-03	CRNRA	GA-10	UNITED STATES NATIONAL PARK SERVICE (678) 538-1200
GA-CR-04	CRNRA - POWERS ISLAND	GA-10	UNITED STATES NATIONAL PARK SERVICE (678) 538-1200
GA-CR-05	CRNRA - COCHRAN SHOALS	GA-10	UNITED STATES NATIONAL PARK SERVICE (678) 538-1200
GA-CR-06	RIVER PARK	GA-10	MOST LIKELY PART OF CRNRA

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ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-CR-07	WHITEWATER CREEK TRAILS	GA-10	UNITED STATES NATIONAL PARK SERVICE (678) 538-1200
GA-CR-08	CRNRA - PACES MILL	GA-9	UNITED STATES NATIONAL PARK SERVICE (678) 538-1200
GA-CR-09	RL SUTTON WATER RECLAMATION FACILITY	GA-9	COBB COUNTY WATER SYSTEM (404) 609-6050
GA-CR-10	ATLANTA CLAYTON WATER RECLAMATION CENTER (CWRC) / CHATTAHOOCHEE WATER TREATMENT PLANT (CWTP)	GA-9	CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT (404) 351-6120 (CLAYTON) (404) 546-0311 (CWTP)
GA-CR-11	POTENTIAL WATER AND/OR WASTEWATER TREATMENT FACILITY	GA-9	MOST LIKELY PART OF CWRC OR CWTP
GA-CR-12	CRNRA	GA-9	(UNITED STATES NATIONAL PARK SERVICE 678) 538-1200
GA-CR-13	WHITTIER MILLS PARK	GA-9	CITY OF ATLANTA, OFFICE OF PARKS (404) 564-6813
GA-CR-14	PIPELINE CROSSING	GA-9	N/A = PHYSICAL FEATURE
GA-CR-15	PIPELINE CROSSING	GA-9	N/A = PHYSICAL FEATURE
GA-CR-16	PIPELINE CROSSING	GA-10	N/A = PHYSICAL FEATURE
GA-CR-17	PIPELINE CROSSING	GA-9	N/A = PHYSICAL FEATURE
GA-CR-18	PIPELINE CROSSING	GA-9	N/A = PHYSICAL FEATURE
GA-CR-19	SOUTH COBB WATER RECLAMATION FACILITY - AUSTELL	GA-8	COBB COUNTY WATER SYSTEM (770) 819-3204
GA-CR-20	CNP-PALISADES	GA-10	UNITED STATES NATIONAL PARK SERVICE (678) 538-1200
GA-CR-21	SWEETWATER CREEK CONFLUENCE	BAIN-3	N/A = PHYSICAL FEATURE
GA-CR-22	LOCK/DAM ON DOG RIVER ROAD	BAIN-3B	N/A = PHYSICAL FEATURE
GA-CR-23	CHATTAHOOCHEE BEND STATE PARK	GA-5C	GEORGIA STATE PARKS (770) 254-7271
GA-CR-24	CHATTAHOOCHEE BEND STATE PARK - BOAT RAMP	GA-4C	GEORGIA STATE PARKS (770) 254-7271
GA-CR-25	BUSH HEAD SHOALS STATE PARK	GA-4D	GEORGIA STATE PARKS (770) 254-7271
GA-CR-26	BUSH CREEK RECREATION AREA	N/A	HEARD COUNTY DEPARTMENT OF RECREATION (706) 675-2267

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ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-CR-27	SNAKE CREEK RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-28	NEW RIVER RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-29	CARTER CREEK RECREATIONAL AREA	N/A	USACOE (706) 645-2937
GA-CR-30	GEORGIA DNR WMA	N/A	(800) 241-4113; GEORGIA DNR
GA-CR-31	CHATTAHOOCHEE PARK	N/A	UNITED STATES NATIONAL PARK SERVICE (678) 538-1200
GA-CR-32	RINGER RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-33	CROSSROAD RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-34	BOAT RAMP	N/A	--
GA-CR-35	GEORGIA RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-36	LIBERTY HILL RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-37	YELLOWJACKET CREEK RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-38	LAKESIDE GEORGIA DNR WMA	N/A	GEORGIA DNR (800) 241-4113
GA-CR-39	DIXIE CREEK DNR WMA	N/A	GEORGIA DNR (800) 241-4113
GA-CR-40	MCGEE RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-41	MARINA - SEMINOLE ROAD	N/A	--
GA-CR-42	AUTRY PARK	N/A	--
GA-CR-43	WHITEWATER ACCESS	N/A	USACOE (706) 645-2937
GA-CR-44	CHATTACHOOCHEE BOY SCOUT RESERVATION	N/A	--
GA-CR-45	PYNE ROAD PARK	N/A	--
GA-CR-46	INDIAN SPRINGS GROUP CAMP	N/A	GEORGIA STATE PARKS (770) 504-2277
GA-CR-47	HORACE KING ACCESS	N/A	USACOE (706) 645-2937
GA-CR-48	WHITETAIL RIDGE PARK	N/A	USACOE (706) 884-8972
GA-CR-49	WHITETAIL RIDGE CAMPGROUND	N/A	USACOE (706) 884-8972
GA-CR-50	HOLIDAY PARK	N/A	USACOE (706) 884-6818
GA-CR-51	GLASS BRIDGE RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-52	EARL COOK RECREATION AREA AND DAY USE PARK	N/A	USACOE (706) 645-2937
GA-CR-53	BIRD CREEK RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-54	POTTS ROAD RECREATION AREA	N/A	USACOE (706) 645-2937

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-CR-55	MAPLE CREEK PARK	N/A	--
GA-CR-56	LONG CANE RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-57	R SHAEFFER HEARD PARK	N/A	(706) 645-2404
GA-CR-58	OAKLAND RECREATION PARK	N/A	--
GA-CR-59	VEASEY CREEK RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-60	ROCKY POINT RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-61	AMITY PARK	N/A	USACOE (706) 645-2937
GA-CR-62	WEST LAKE RECREATION AREA	N/A	USACOE (706) 645-2937
GA-CR-63	BURNT VILLAGE PARK	N/A	--
GA-CR-64	SOUTHERN HARBOR RESORT MARINA	N/A	(334) 644-3881; SOUTHERN HARBOR MARINA
GA-CR-65	WEST OVER LOOK AREA	N/A	USACOE (706) 645-2937
GA-CR-66	HARDLEY CREEK RECREATION AREA AND DAM	N/A	USACOE (706) 645-2937
GA-CR-67	WEHALKEE SERVICE AREA (FUTURE)	N/A	--
GA-CR-68	MCINTOSH RESERVE PARK	GA-5C	CARROLL COUNTY PARKS AND FACILITIES (770) 830-5879
GA-CR-69	CHATTAHOOCHEE RAW WATER PUMPING FACILITY	GA-9	CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT (404) 546-0311
N/A = Not applicable			

Along the Savannah River, Knox Scout Reservation and Wildlife Area, four state parks (Richard B. Russell, Bobby Brown, Baker Creek, and Elijah Clark), three water treatment facilities (North Augusta Water Treatment Plant, Aiken County Water Treatment Facility, and one unidentified potential water treatment facility), and four archaeological sites are considered sensitive to oil spills and should be the first priority for protection and cleanup measures in the event of a spill. A listing of the sensitive areas along the Savannah River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Georgia Sensitive Areas (Savannah River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-SR-01	UNNAMED POND	GA-26	N/A = PHYSICAL FEATURE
GA-SR-02	UNNAMED BOAT RAMP	GA-26	--
GA-SR-03	UNNAMED BOAT RAMP	GA-26	--
GA-SR-04	UNNAMED BOAT RAMP	SC-1A	--

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-SR-05	RICHARD B. RUSSELL STATE PARK	GA-26A	(706) 213-2045
GA-SR-06	ARROWHEAD POINTE GOLF COURSE	SC-1B	(706) 283-6000
GA-SR-07	UNNAMED BOAT RAMP / PARK	SC-1B	--
GA-SR-08	UNNAMED BOAT RAMP	SC-1B	--
GA-SR-09	ALLEN CREEK BOAT RAMP	SC-1B	--
GA-SR-10	UNNAMED PARK	SC-1B	--
GA-SR-11	CALHOUN FALLS STATE RECREATION AREA	SC-4C	(864) 447-8267
GA-SR-12	UNNAMED MARINA / BOAT RAMP	SC-4C	--
GA-SR-13	UNNAMED BOAT RAMP	SC-4C	--
GA-SR-14	UNNAMED BOAT RAMP	SC-4C	--
GA-SR-15	UNNAMED BOAT RAMP	GA-26A	--
GA-SR-16	LAKE RUSSELL BOAT RAMP	SC-4C	--
GA-SR-17	BOBBY BROWN STATE PARK	N/A	(706) 359-3458
GA-SR-18	MT. CARMEL PARK NORTH	N/A	--
GA-SR-19	PATTERSON BRANCH PICNIC AREA / PARK	N/A	--
GA-SR-20	LEROYS FERRY RECREATION AREA	AUG-6B	USACOE (877) 444-6777
GA-SR-21	FISHING CREEK PUBLIC USE AREA	N/A	--
GA-SR-22	HICKORY KNOB STATE RESORT PARK AND GOLF	AUG-6B	(864) 391-2450
GA-SR-23	SAVANNAH LAKES VILLAGE GOLF CLUB	AUG-6B	(864) 391-4115
GA-SR-24	BAKER CREEK STATE PARK	AUG-6B	(864) 443-2457
GA-SR-25	ELIJAH CLARK STATE PARK	N/A	(706) 359-3458
GA-SR-26	UNNAMED BOAT RAMP	N/A	--
GA-SR-27	SAVANNAH LAKES MARINA	N/A	(864) 391-3477
GA-SR-28	CHAMBERLAIN FERRY PICNIC AREA / PARK	AUG-6C	--
GA-SR-29	DORN FISH FACILITY	AUG-6C	--
GA-SR-30	UNNAMED BOAT RAMP	AUG-6C	--
GA-SR-31	MONTICELLO GOLF COURSE	AUG-6A	--
GA-SR-32	BUFFALO CREEK RECREATION AREA	AUG-6B	--
GA-SR-33	CAMPGROUND	AUG-6C	--
GA-SR-34	POINTE PLEASANT PARK	AUG-6C	--
GA-SR-35	CAMP DANIEL MARSHALL	AUG-6C	(706) 359-7292
GA-SR-36	KNOX SCOUT RESERVATION / WILDLIFE AREA	AUG-6C	(706) 359-5422
GA-SR-37	PARKSVILLE RECREATION AREA	AUG-9	USACOE (800) 533-3478

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-SR-38	PARKSVILLE CAMPGROUND	AUG-9	USACOE (800) 533-3478
GA-SR-39	HAMILTON BRANCH STATE PARK	AUG-9	(864) 333-2223
GA-SR-40	CAMPGROUND	AUG-9A	--
GA-SR-41	CAMPGROUND	AUG-9A	--
GA-SR-42	CAMPGROUND	AUG-9A	--
GA-SR-43	WILDWOOD PARK / DISK GOLF / CAMPGROUNDS)	N/A	(706) 541-0586
GA-SR-44	FORT GORDON RECREATION AREA	N/A	--
GA-SR-45	MISTLETOE STATE PARK	N/A	GEORGIA STATE PARKS (706) 541-0321
GA-SR-46	HOLIDAY PARK	N/A	--
GA-SR-47	AMITY RECREATION AREA / BOAT RAMP	N/A	USACOE (706) 359-1171
GA-SR-48	BOAT RAMP	N/A	--
GA-SR-49	CHEROKEE BOAT RAMP	N/A	--
GA-SR-50	BOAT RAMP	N/A	--
GA-SR-51	CLARKE S HILL LAKE BOAT RAMP	AUG-6C	--
GA-SR-52	ROCKY BRANCH GOLF COURSE	AUG-6C	(706) 359-4303
GA-SR-53	LAKE SPRINGS RECREATION AREA	AUG-9A	(706) 541-0150
GA-SR-54	TRADE WINDS MARINA	AUG-9A	(706) 541-1380
GA-SR-55	RIVER DAM	AUG-9A	N/A = PHYSICAL FEATURE
GA-SR-56	BELOW DAM RECREATION AREA	AUG-9A	(864) 333-1100
GA-SR-57	BOAT RAMP	AUG-9A	--
GA-SR-58	BEACH / PARK	AUG-9A	--
GA-SR-59	BOAT RAMP	AUG-9A	--
GA-SR-60	AUGUSTA SAILING CLUB / MARINA	AUG-9A	(706) 309-9463
GA-SR-61	WEST DAM RECREATION AREA	AUG-9A	USACOE (800) 533-3478
GA-SR-62	HAMILTON BRANCH CAMPGROUND	AUG-9A	SOUTH CAROLINA PARKS (864) 333-2223
GA-SR-63	LAKE SPRINGS CAMPGROUND	AUG-9A	(706) 541-0150
GA-SR-64	CLAY HILL CAMPGROUND	N/A	(706) 359-7495
GA-SR-65	RAYSVILLE MARINA	N/A	(706) 595-5582
GA-SR-66	RAYSVILLE CAMPGROUND	N/A	(706) 595-6759
GA-SR-67	CHAMPIONS RETREAT GOLF COURSE	N/A	(706) 854-6960
GA-SR-68	FURYS FERRY BOAT RAMP	AUG-13A	--
GA-SR-69	MIMS PT. INDIAN VILLAGE ARCHEOLOGICAL SITE	AUG-13A	--

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-SR-70	STEVENS CREEK PUBLIC PARK / BOAT RAMP	AUG-13A	--
GA-SR-71	HAMMONDS FERRY BOAT RAMP	AUG-14	--
GA-SR-72	RIVERWALK MARINA / BOAT RAMP	AUG-14	(706) 722-1388
GA-SR-73	NORTH AUGUSTA / RIVERVIEW PARKS ACTIVITY CENTER	AUG-14	(803) 441-4311
GA-SR-74	NORTH AUGUSTA WATER TREATMENT PLANT	AUG-14	CITY OF NORTH AUGUSTA (803) 279-2121 OR (803) 441-4202
GA-SR-75	DISC GOLF COURSE	AUG-14	--
GA-SR-76	EISENHOWER PARK	AUG-13A	(706) 821-2800
GA-SR-77	BOECKH PARK/ NORTH AUGUST GREENWAY	AUG-14	NORTH AUGUSTA DEPARTMENT OF PARKS AND RECREATION (803) 441-4300
GA-SR-78	THE RIVER GOLF CLUB	AUG-14	--
GA-SR-79	BRICK POND PARK	AUG-14	--
GA-SR-80	RIVERWALK AUGUSTA PARK	AUG-14	--
GA-SR-81	AIKEN COUNTY PUBLIC SERVICES AUTHORITY (POSSIBLE WATER TREATMENT FACILITY)	AUG-14	(803) 278-1911
GA-SR-82	PREHISTORIC INDIAN RIVERSTONE FISH TRAPS	AUG-13A	--
GA-SR-83	SAVANNAH RIVER BLUFFS HERITAGE PRESERVE	AUG-13A	SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES HERITAGE TRUST PROGRAM (803) 734-3886
GA-SR-84	STALLING 4300 YEAR-OLD INDIAN VILLAGE	AUG-13A	--
GA-SR-85	SAVANNAH RIVER DAM / PAVILION PARK / AUGUSTA CANAL WALKING TRAIL	AUG-13A	--
GA-SR-86	RECREATIONAL COMPLEX	AUG-14	--
GA-SR-87	POSSIBLE WASTEWATER TREATMENT FACILITY	AUG-14	--
GA-SR-88	MARINA (MARINA DRIVE)	GA-26C	--
GA-SR-89	RUSSELL DAM	SC-4C	N/A = PHYSICAL FEATURE
GA-SR-90	STROM THURMOND RESERVOIR	N/A	N/A = PHYSICAL FEATURE
GA-SR-91	2ND PIPELINE CROSSING	AUG-14	N/A = PHYSICAL FEATURE
GA-SR-92	SAVANNAH LOCK AND DAM / J. B. MESSERLY WASTEWATER TREATMENT PLANT	N/A	AUGUSTA UTILITIES (WASTEWATER TREATMENT) (706) 312-4154

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
	(APPROXIMATELY 2 MILES NORTHWEST)		
GA-SR-93	BURTON'S FERRY PUBLIC BOAT RAMP	N/A	--
GA-SR-94	JOHNSON'S LANDING	N/A	--
GA-SR-95	MCBEAN CREEK CONFLUENCE	N/A	N/A = PHYSICAL FEATURE
GA-SR-96	JACKSON BOAT RAMP	N/A	--
GA-SR-97	PIPELINE CROSSING	GA-26	N/A = PHYSICAL FEATURE
N/A = Not applicable			
Note: GA-SR-60 to GA-SR-80 are unlikely to be impacted in the event of a worse-case scenario oil spill due to the location within or downgradient of a large lake/reservoir system (J. Strom Thurmond Reservoir/Clarks Hill Lake however, these locations were included as a conservative measure.			

Along the Flint River, the Silver Lake WMA is considered sensitive to oil spills and should be the first priority for protection and cleanup measures in the event of a spill. A listing of the sensitive areas along the Flint River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Georgia Sensitive Areas (Flint River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-FR-01	ROCKY BEND FLINT RIVER RETREAT	BAIN-36	ROCK BEND FLINT RIVER RETREAT (229) 343-2767
GA-FR-02	ICHAWAYNOCHAWAY CREEK CONFLUENCE	BAIN-38	N/A = PHYSICAL FEATURE
GA-FR-03	BOAT LANDING	BAIN-39A	--
GA-FR-04	BIG SLOUGH CONFUENCE	BAIN-41	N/A = PHYSICAL FEATURE
GA-FR-05	EARLE MAY PARK AND BAINBRIDGE BOAT BASIN PARK	BAIN-41	CITY OF BAINBRIDGE PARKS (229) 246-2000
GA-FR-06	BAINBRIDGE MARINA	BAIN-41	BAINBRIDGE MARINA (229) 246-6336
GA-FR-07	CHENEY GRIFFIN PARK	BAIN-41	CITY OF BAINBRIDGE PARKS (229) 515-0022
GA-FR-08	SILVER LAKE WMA	BAIN-41B	GEORGIA DNR (229) 430-4254
GA-FR-09	ENTRANCE INTO LAKE SEMINOLE	BAIN-41B	N/A = PHYSICAL FEATURE
GA-FR-10	CHASON PARK	BAIN-41	CITY OF BAINBRIDGE PARK (229) 416-4007
GA-FR-11	FLINT RIVER RV PARK	BAIN-41	FLINT RIVER RV PARK (229) 246-5802

Along the Oconee River, two water treatment facilities (Middle Oconee and ACC North Oconee), the State of Georgia Botanical Gardens, and the Oconee National Forest are considered sensitive to oil spills and should be the first priority for protection and cleanup measures in the event of a spill. A listing of the sensitive areas along the Oconee River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Georgia Sensitive Areas (Oconee River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
GA-OR-01	BEN BURTON PARK	GA-18	--
GA-OR-02	MIDDLE OCONEE WATER TREATMENT PLANT	GA-18	ATHENS-CLARKE COUNTY WATER RECLAMATION FACILITIES (706) 613-3486
GA-OR-03	STATE BOTANICAL GARDENS OF GEORGIA	GA-18	(706) 542-1244
GA-OR-04	MIDDLE OCONEE RAILROAD CROSSING	GA-20B	N/A = PHYSICAL FEATURE
GA-OR-05	SANDY CREEK NATURE CENTER	GA-18	(706) 613-3615
GA-OR-06	ATHENS-NORTH OCONEE RIVER GREENWAY	GA-18	(706) 613-3801
GA-OR-07	NORTH OCONEE RIVER GREENWAY	GA-18	(706) 613-3801
GA-OR-08	NORTH OCONEE RIVER PARK	GA-20A	--
GA-OR-09	DUDLEY PARK	GA-20A	(706) 613-3801
GA-OR-10	ACC NORTH OCONEE WATER TREATMENT PLANT	GA-20A	ATHENS-CLARKE COUNTY WATER RECLAMATION FACILITIES (706) 613-3486
GA-OR-11	BARNETT SHOALS ROAD DAM	GA-20B	--
GA-OR-12	OCONEE NATIONAL FOREST	GA-20B	(770) 297-3000 OR (770) 536-0541
GA-OR-13	OCONEE RIVER CAMPGROUND AND BOAT RAMP	GA-20C	--
GA-OR-14	SCULL SHOALS EXPERIMENTAL FOREST	GA-20C	--
GA-OR-15	FISHING CREEK AND WETLANDS AREAS	GA-20C	--
GA-OR-16	DYAR'S PASTURE RECREATION AREA	GA-20C	UNITED STATES FOREST SERVICE

It should be noted that, although the Chattahoochee, Savannah, Flint, and Oconee Rivers are the only major rivers that the pipeline crosses, there are several other smaller rivers, creeks and ponded waters that are considered environmentally sensitive as well. Those rivers and creeks above a base flow of 10 cms as well as significant ponded waters (i.e., lakes, ponds, and reservoirs) are listed/highlighted in the above tables.

6. Threatened and Endangered Species

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

A summary of threatened and endangered species along the pipeline corridor in the inland areas of Georgia and within approximately 75 miles downgradient of where the pipeline crosses the Chattahoochee, Savannah, Flint, and Oconee Rivers is provided in the table below. Specific information on these threatened and endangered species as well as migratory birds and critical habitats in the area are provided in Appendix A.

Threatened and Endangered Species (Georgia)

	Inland Georgia	Chattahoochee River	Savannah River	Flint River	Oconee River
Threatened and Endangered Species					
Overall	54	14	26	16	3
Amphibians	1	0	2	2	0
Birds	2	1	4	2	0
Clams	15	5	1	5	0
Conifers and Cycads	1	0	0	1	0
Ferns and Allies	1	1	1	0	1
Fish	8	0	2	0	0
Flowering Plants	19	4	9	4	2
Mammals	3	3	2	0	0
Reptiles	3	0	5	2	0
Snails	1	0	0	0	0
Migratory Birds	33	20	37	30	16

Colonial Pipeline Company
ENVIRONMENTALLY SENSITIVE AREAS

Alabama

1. Description

In Alabama, the pipeline traverses predominantly mixed forest and farmland with a low human population density, with the exception of the metropolitan area of Birmingham. The pipeline traverses three major rivers within Alabama (the Cahaba River, Tombigbee River, and the Black Warrior River), as well as smaller rivers and creeks. Several lakes and waterways are also located within the one-mile corridor of the pipeline.

2. Water Intakes

Oil may become entrained in water intake structures, causing extensive and expensive damage, and possible harm if the material is flammable or explosive. All precautions should be taken to prevent such materials from entering water intakes in the event of a spill in the vicinity of a water intake in which case the point of contact should be notified immediately. Water intake locations are presented in Section 09.06.00 of the plan.

3. Access

The environmentally sensitive inland areas are generally accessible by vehicle or on foot. The sensitive areas along the rivers (i.e., within approximately 75 miles downgradient from the Cahaba River, Tombigbee River, and the Black Warrior River crossings) are generally accessible by boat and vehicle.

4. Sensitive Inland Areas

Within the Alabama inland areas, the swamps (Boligee Swamp and Ruffin Swamp), Yellowleaf Game Reserve, and Moundville Archaeological Park as well as several lakes and rivers are environmentally sensitive and should be a priority for protection and cleanup measures in the event of a spill. A listing of the sensitive inland areas in Alabama are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Alabama Sensitive Areas (Inland Areas)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-01	SUCARNOOTCHEE RIVER	AL-2	N/A = PHYSICAL FEATURE
AL-02	TURKEY CREEK	AL-4	N/A = PHYSICAL FEATURE
AL-03	FACTORY CREEK(S)	AL-5	N/A = PHYSICAL FEATURE
AL-04	TOMBIGBEE RIVER	AL-5	N/A = PHYSICAL FEATURE
AL-05	BOLIGEE CREEK SWAMP	AL-6	N/A = PHYSICAL FEATURE
AL-06	CANAL DITCH	AL-7	N/A = PHYSICAL FEATURE
AL-07	CYPRESS CUTOFF LAKE	AL-10	N/A = PHYSICAL FEATURE
AL-08	WHITES ISLAND (BLACK WARRIOR RIVER)	AL-10	N/A = PHYSICAL FEATURE
AL-09	LITTLE KEATON LAKE	AL-10	N/A = PHYSICAL FEATURE
AL-10	UNNAMED CREEK OR RIVER	AL-10	N/A = PHYSICAL FEATURE

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-11	MOUNDVILLE ARCHEOLOGICAL PARK	AL-10	(205) 371-2234
AL-12	MOUNDVILLE BALL PARK	AL-11	(205) 371-2641
AL-13	MOUNDVILLE PUBLIC AIRSTRIP	AL-10	(205) 371-2641
AL-14	TALLADEGA NATIONAL FOREST EASTERN BLOCK / NEARBY CAMPGROUNDS	AL-13	(205) 926-9765
AL-15	CLIFTON BRANCH (LAKE)	AL-16	N/A = PHYSICAL FEATURE
AL-16	CAHABA RIVER	AL-18	N/A = PHYSICAL FEATURE
AL-17	RUFFIN SWAMP	AL-20	N/A = PHYSICAL FEATURE
AL-18	PENHALE PARK	AL-20	HELENA PARKS & RECREATION (205) 620-2877
AL-19	CADDELL LAKE	AL-20	N/A = PHYSICAL FEATURE
AL-20	WYATT LAKE	AL-20	N/A = PHYSICAL FEATURE
AL-21	HOLTZCLAW LAKE	AL-20	N/A = PHYSICAL FEATURE
AL-22	JOE TUCKER PARK	AL-20	HELENA PARKS & RECREATION (205) 620-2877
AL-23	WILLIAMS LAKE	AL-20	N/A = PHYSICAL FEATURE
AL-24	BUCK LAKE	AL-21	N/A = PHYSICAL FEATURE
AL-25	BIRMINGHAM SOUTH CAMPGROUND	AL-20	(205) 664-8832
AL-26	COKER PARK	AL-20	(205) 620-6426
AL-27	YELLOWLEAF GAME PRESERVE	AL-21	--
AL-28	INDIAN HILLS GOLF COURSE	AL-22	(205) 349-1500
AL-29	LAKE NEXT TO INDIAN HILLS GOLF COURSE	AL-22	INDIAN HILLS GOLF COURSE (205) 349-1500
AL-30	PURDY LAKE	AL-22	N/A = PHYSICAL FEATURE
AL-31	DEERWOOD LAKE	AL-23	N/A = PHYSICAL FEATURE
AL-32	COOSA RIVER	AL-24	N/A = PHYSICAL FEATURE
AL-33	CHOCCOLOCCO CREEK	AL-29	N/A = PHYSICAL FEATURE
AL-34	GRANTS POND	AL-29	N/A = PHYSICAL FEATURE
AL-35	CHOCCOLOCCO CREEK	AL-29	N/A = PHYSICAL FEATURE
AL-36	ANNISTON METROPOLITAN AIRPORT	AL-30	(256) 831-4410
AL-37	OXFORD LAKE	AL-30	N/A = PHYSICAL FEATURE
AL-38	RECREATIONAL COMPLEX	AL-30	OXFORD PARKS & RECREATION (256) 831-2660
AL-39	OXFORD CIVIC CENTER	AL-30	OXFORD PARKS & RECREATION (256) 831-2660
AL-40	BLUE POND	AL-30	N/A = PHYSICAL FEATURE

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-41	RECREATION COMPLEX / BALL PARKS	AL-30	OXFORD PARKS & RECREATION (256) 831-2660
AL-42	ROBERTSON'S LAKE	AL-30	N/A = PHYSICAL FEATURE
AL-43	CEDAR RIDGE GOLF COURSE	AL-30	(256) 831-7222
AL-44	RIVERCHASE GOLF COURSE	AL-20	(205) 988-4140
AL-45	LAKE TRACE	AL-20	N/A = PHYSICAL FEATURE
AL-46	HOOVER METROPOLITAN STADIUM (FORMERLY KNOWN AS REGIONS PARK)	AL-20	(205) 458-8000
AL-47	SCOUT LAKE	AL-20	N/A = PHYSICAL FEATURE
AL-48	B MOUNTAIN LAKE	AL-20	N/A = PHYSICAL FEATURE
AL-49	UNNAMED LAKE/POND	BIRM-2	N/A = PHYSICAL FEATURE
AL-50	RENAISSANCE BIRMINGHAM ROSS RIDGE GOLF COURSE	BIRM-2A	(205) 916-7677
AL-51	WILBORN LAKE	AL-20	N/A = PHYSICAL FEATURE
AL-52	CAHABA RIVER	AL-20	N/A = PHYSICAL FEATURE
AL-53	OXMOOR VALLEY GOLF COURSE / RTJ AT OXMOOR VALLEY	BIRM-2A	(205) 942-1177
AL-54	HELENA (RUFFIN ROAD) SPORTS COMPLEX AND COMMUNITY CENTER	AL-20	(205) 620-2877
AL-55	BUCK CREEK	AL-20	N/A = PHYSICAL FEATURE
AL-56	RED MOUNTAIN PARK	BIRM-2	--
AL-57	WESTSIDE GOLF COURSE / DRIVING RANGE	BIRM-2A	(205) 923-2979
AL-58	BUCCANEER STADIUM	AL-20	HOOVER HIGH SCHOOL (205) 439-1200
AL-59	UNNAMED POND/LAKE	AL-21	N/A = PHYSICAL FEATURE
AL-60	UNNAMED POND/LAKE	AL-21	N/A = PHYSICAL FEATURE
AL-61	VINCENT HIGH SCHOOL ATHLETIC FIELDS	AL-24	(205) 682-7300
AL-62	YMCA: CAMP COSBY	AL-25	(256) 268-2007
AL-63	LOGAN MARTIN LAKE	AL-25	N/A = PHYSICAL FEATURE
AL-64	USFS FACILITY / SHOAL CREEK RANGER STATION	N/A	(256) 463-2272
AL-65	LAKE HEFLIN	AL-33	N/A = PHYSICAL FEATURE
AL-66	UNNAMED POND/LAKE	AL-34	N/A = PHYSICAL FEATURE
AL-67	CE BOYD LAKE	AL-3	N/A = PHYSICAL FEATURE
AL-68	BLACK WARRIOR RIVER	AL-9	N/A = PHYSICAL FEATURE
AL-69	TOMBIGBEE RIVER	AL-6	N/A = PHYSICAL FEATURE
AL-70	UNNAMED POND/LAKE	AL-6	N/A = PHYSICAL FEATURE
AL-71	TALLAPOOSA RIVER	AL-34	N/A = PHYSICAL FEATURE
AL-72	TALLADEGA NATIONAL FOREST WESTERN BLOCK	AL-31	SHOAL CREEK RANGER DISTRICT

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
			(256) 463-2272
N/A – Not applicable			

5. Sensitive Areas along Rivers

The pipeline crosses three major rivers within Alabama: the Cahaba River, Tombigbee River, and Black Warrior River.

Along the Cahaba River, the Cahaba River National Wildlife Refuge and Marion Fish Hatchery Number One are environmentally sensitive and should be a priority for protection and cleanup. A listing of the sensitive areas along the Cahaba River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Alabama Sensitive Areas (Cahaba River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-CR-01	CAHABA RIVER NATIONAL WILDLIFE REFUGE – NORTH SITE	AL-17	UNITED STATES FISH AND WILDLIFE (256) 848-7085 OR (256) 848-6833
AL-CR-02	CAHABA RIVER NATIONAL WILDLIFE REFUGE – SOUTH SITE	AL-17A	UNITED STATES FISH AND WILDLIFE (256) 848-7085
AL-CR-03	CAHABA FALLS GOLF COURSE	AL-15A	(205) 926-9323
AL-CR-04	BALL PARK	AL-15A	--
AL-CR-05	PLANTATION RD. UNNAMED LAKE/POND	AL-15A	N/A = PHYSICAL FEATURE
AL-CR-06	TALLADEGA NATIONAL FOREST	AL-15C	(205) 926-9765
AL-CR-07	PERRY LAKES PARK	AL-15E	N/A = PHYSICAL FEATURE
AL-CR-08	MARION FISH HATCHERY NUMBER ONE	AL-15D	--
AL-CR-09	UNNAMED POND/LAKE	AL-15G	N/A = PHYSICAL FEATURE
AL-CR-10	UNNAMED POND/LAKE	AL-15G	N/A = PHYSICAL FEATURE
AL-CR-11	UNNAMED POND/LAKE	AL-15G	N/A = PHYSICAL FEATURE
AL-CR-12	CAHABA RIVER PUBLIC USE AREA	AL-15I	--
AL-CR-13	UNNAMED POND/LAKE	AL-17A	N/A = PHYSICAL FEATURE
AL-CR-14	CONFLUENCE WITH LITTLE CAHABA RIVER	AL-17	N/A = PHYSICAL FEATURE

Along the Tombigbee River, Demopolis State WMA, Demopolis Water Treatment Plant, and the Choctaw National Wildlife Refuge are considered sensitive to oil spills and should be the first priority for protection and cleanup measures in the event of a spill. A listing of the sensitive areas along the

Tombigbee River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Alabama Sensitive Areas (Tombigbee River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-TBR-01	UNNAMED MARSH / SWAMP	AL-5	N/A = PHYSICAL FEATURE
AL-TBR-02	UNNAMED POND / LAKE	AL-5	N/A = PHYSICAL FEATURE
AL-TBR-03	LUKE'S LANDING BOAT RAMP	AL-5	--
AL-TBR-04	WETLAND AREA	AL-7B	N/A = PHYSICAL FEATURE
AL-TBR-05	DEMOPOLIS STATE WMA	AL-7E	--
AL-TBR-06	DEMOPOLIS ACCESS AREA PARK	AL-7E	--
AL-TBR-07	DEMOPOLIS BOTANICAL GARDENS	AL-7E	(334) 289-9399
AL-TBR-08	CONFLUENCE WITH BLACK WARRIOR RIVER	AL-7E	N/A = PHYSICAL FEATURE
AL-TBR-09	DEMOPOLIS YACHT BASIN AND RV PARK	AL-7E	(334) 289-4374
AL-TBR-10	DEMOPOLIS WATER TREATMENT PLANT	AL-7D	CITY OF DEMOPOLIS (334) 289-1344 OR (334) 289-1344
AL-TBR-11	FOSCUE PARK	AL-7E	--
AL-TBR-12	GARDNERS BLUFF/TOMBIGBEE RIVER DAM	AL-7D	--
AL-TBR-13	LOCK THREE RIGHT BANK PUBLIC USE AREA	AL-7G	--
AL-TBR-14	LOCK NUMBER TWO PARK	AL-5D	--
AL-TBR-15	GRIFFIN LAKE CONFLUENCE	AL-5B	N/A = PHYSICAL FEATURE
AL-TBR-16	BASHI CREEK PUBLIC USE AREA	N/A	USACOE (334) 289-3540
AL-TBR-17	WOODS BLUFF PUBLIC USE AREA	N/A	--
AL-TBR-18	UNNAMED BACKWATER LAKE	N/A	N/A = PHYSICAL FEATURE
AL-TBR-19	JUDY'S SLOUGH	N/A	N/A = PHYSICAL FEATURE
AL-TBR-20	CHOCTAW NATIONAL WILDLIFE REFUGE	N/A	UNITED STATES FISH AND WILDLIFE 251-843-5238
AL-TBR-21	COFFEEVILLE LAKE PUBLIC USE AREA / SERVICE PARK CAMPGROUND	N/A	USACOE 251-753-6935
AL-TBR-22	BOAT RAMP	N/A	--
AL-TBR-23	DAM/LOCK	N/A	N/A = PHYSICAL FEATURE
AL-TBR-24	LOCK NUMBER ONE LEFT BANK PUBLIC USE AREA	N/A	--
AL-TBR-25	MORGAN CREEK CONFLUENCE	AL-5D	N/A = PHYSICAL FEATURE

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ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-TBR-26	CHICKASAW BOGUE CONFLUENCE	AL-7G	N/A = PHYSICAL FEATURE
AL-TBR-27	SUCARNOOCHEE RIVER CONFLUENCE	AL-5B	N/A = PHYSICAL FEATURE
N/A = Not applicable			

Along the Black Warrior River, a campground and a number of public use areas are considered sensitive to oil spills and should be the first priority for protection and cleanup measures in the event of a spill. A listing of the sensitive areas along the Black Warrior River are provided in the table below. Additional details, including geospatial information, can also be found in Appendix B.

Alabama Sensitive Areas (Black Warrior River)

ID	Sensitive Area Name	Quadrangle Number	Contact/Phone Number
AL-BWR-01	UNNAMED BACKWATER LAKE/POND	AL-9	N/A = PHYSICAL FEATURE
AL-BWR-02	LOCK EIGHT PUBLIC USE AREA	AL-9	--
AL-BWR-03	FINCHES FERRY PUBLIC USE AREA	AL-7A	--
AL-BWR-04	LAKE	AL-7A	N/A = PHYSICAL FEATURE
AL-BWR-05	JENNINGS FERRY CAMP GROUND AND PUBLIC USE AREA	AL-7A	(205) 372-1217
AL-BWR-06	WARRIOR LOCK AND DAM PUBLIC USE AREA	AL-7A	--
AL-BWR-07	LOCK SEVEN PUBLIC USE AREA	AL-7A	--
AL-BWR-08	DAMSITE PUBLIC USE AREA	AL-7A	--
AL-BWR-09	DAM (HOWARD BROWN LAKE)	AL-7A	N/A = PHYSICAL FEATURE
AL-BWR-10	LOCKS AND DAM BYPASS	AL-7A	N/A = PHYSICAL FEATURE
AL-BWR-11	LOCK NUMBER SIX PUBLIC USE AREA	AL-7C	--
AL-BWR-12	WOLF BLUFF BOAT RAMP	AL-7C	--
AL-BWR-13	LOCK NUMBER FIVE PUBLIC USE AREA	AL-10C	--
AL-BWR-14	ARCOLA PUBLIC USE AREA	AL-7E	--
AL-BWR-15	BACKBONE BRANCH PUBLIC USE AREA	AL-7E	--
AL-BWR-16	LARGE BACKWATER POND/LAKE	AL-7E	N/A = PHYSICAL FEATURE
AL-BWR-17	FRENCH CREEK PUBLIC USE AREA	AL-7E	--
AL-BWR-18	RUNAWAY BRANCH PUBLIC USE AREA #1	AL-7E	--
AL-BWR-19	RUNAWAY BRANCH PUBLIC USE AREA #2	AL-7E	--

It should be noted that, although the Cahaba, Tombigbee, and Black Warrior Rivers are the only major rivers that the pipeline crosses, there are several other smaller rivers, creeks and ponded waters that are considered environmentally sensitive as well. Those rivers and creeks above a base flow of 10 cms as well as significant ponded waters (i.e., lakes, ponds, and reservoirs) are listed/highlighted in the above tables.

6. Threatened and Endangered Species

A summary of threatened and endangered species along the pipeline corridor in the inland areas of Alabama and within approximately 75 miles downgradient of where the pipeline crosses the Cahaba, Black Warrior, and Tombigbee Rivers is provided in the table below. Specific information on these threatened and endangered species as well as migratory birds and critical habitats in the area are provided in Appendix A.

Threatened and Endangered Species (Alabama)

	Inland Alabama	Cahaba River	Black Warrior River	Tombigbee River
Threatened and Endangered Species				
Overall	46	37	11	15
Amphibians	1	1	0	0
Birds	2	2	2	1
Clams	13	13	6	6
Crustaceans	0	0	0	0
Ferns and Allies	0	0	0	0
Fish	8	3	0	2
Flowering Plants	8	7	1	1
Lichens	0	0	1	1
Insects	1	1	1	0
Mammals	3	3	0	1
Reptiles	1	1	0	3
Snails	9	6	0	0
Migratory Birds	25	25	24	26

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ENVIRONMENTALLY SENSITIVE AREAS

Appendix A – Threatened and Endangered Species and Critical Habitats

State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Alabama	Amphibians	Black Warrior Waterdog	Necturus alabamensis	N	C
Alabama	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
Alabama	Birds	Wood Stork	Mycteria americana	N	T
Alabama	Clams	Alabama (=inflated) Heelsplitter	Potamilus inflatus	N	T
Alabama	Clams	Alabama Moccasinshell	Medionidus acutissimus	Y	T
Alabama	Clams	Coosa Moccasinshell	Medionidus parvulus	Y	E
Alabama	Clams	Dark Pigtoe	Pleurobema furvum	N	E
Alabama	Clams	Finelined Pocketbook	Lampsilis altilis	Y	T
Alabama	Clams	Heavy Pigtoe	Pleurobema taitianum	N	E
Alabama	Clams	Orangenacre Mucket	Lampsilis perovalis	Y	T
Alabama	Clams	Ovate Clubshell	Pleurobema perovatum	Y	E
Alabama	Clams	Southern Acornshell	Epioblasma otricaloogensis	Y	E
Alabama	Clams	Southern Clubshell	Pleurobema decisum	Y	E
Alabama	Clams	Southern Pigtoe	Pleurobema georgianum	Y	E
Alabama	Clams	Triangular Kidneyshell	Ptychobranchus greeni	Y	E
Alabama	Clams	Upland Combshell	Epioblasma metastriata	Y	E
Alabama	Fishes	Alabama Sturgeon	Scaphirhynchus suttkusi	N	E
Alabama	Fishes	Blue Shiner	Cyprinella caerulea	N	T
Alabama	Fishes	Cahaba Shiner	Notropis cahabae	N	E
Alabama	Fishes	Goldline Darter	Percina aurolineata	N	T
Alabama	Fishes	Pygmy Sculpin	Cottus pavlus (=pygmaeus)	N	T
Alabama	Fishes	Rush Darter	Etheostoma phytophilum	N	E
Alabama	Fishes	Vermilion Darter	Etheostoma chermocki	N	E
Alabama	Fishes	Watercress Darter	Etheostoma nuchale	N	E
Alabama	Flowering Plants	Alabama Leather Flower	Clematis socialis	N	E
Alabama	Flowering Plants	Gentian Pinkroot	Spigelia gentianoides	N	E
Alabama	Flowering Plants	Georgia Rockcress	Arabis georgiana	N	T
Alabama	Flowering Plants	Green Pitcher plant	Sarracenia oreophila	N	E
Alabama	Flowering Plants	Mohr's Barbara's Buttons	Marshallia mohrii	N	T
Alabama	Flowering Plants	Price's Potato-bean	Apios priceana	N	T
Alabama	Flowering Plants	Tennessee Yellow-eyed Grass	Xyris tennesseensis	N	E
Alabama	Flowering Plants	White Fringeless Orchid	Platanthera integrilabia	N	PT
Alabama	Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	N	E
Alabama	Mammals	Gray Bat	Myotis grisescens	N	E
Alabama	Mammals	Indiana Bat	Myotis sodalis	N	E
Alabama	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Alabama	Reptiles	Flattened Musk Turtle	Sternotherus depressus	N	T
Alabama	Snails	Black Mudalia	Elimia melanoides	N	C
Alabama	Snails	Cylindrical Lioplax (snail)	Lioplax cyclostomaformis	N	E
Alabama	Snails	Flat Pebblesnail	Lepyrium showalteri	N	E
Alabama	Snails	Lacy Elimia (snail)	Elimia crenatella	N	T

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State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Alabama	Snails	Painted Rocksnail	Leptoxis taeniata	N	T
Alabama	Snails	Plicate Rocksnail	Leptoxis plicata	N	E
Alabama	Snails	Rough Hornsnail	Pleurocera foremani	N	E
Alabama	Snails	Round Rocksnail	Leptoxis ampla	N	T
Alabama	Snails	Tulotoma Snail	Tulotoma magnifica	N	T
Georgia	Amphibians	Reticulated Flatwoods Salamander	Ambystoma bishopi	N	E
Georgia	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
Georgia	Birds	Wood Stork	Mycteria americana	N	T
Georgia	Clams	Alabama (=inflated) Heelsplitter	Potamilus inflatus	N	T
Georgia	Clams	Alabama Moccasinshell	Medionidus acutissimus	Y	T
Georgia	Clams	Coosa Moccasinshell	Medionidus parvulus	Y	E
Georgia	Clams	Fat Threeridge (mussel)	Amblema neisleri	Y	E
Georgia	Clams	Finelined Pocketbook	Lampsilis altilis	Y	T
Georgia	Clams	Gulf Moccasinshell	Medionidus penicillatus	Y	E
Georgia	Clams	Oval Pigtoe	Pleurobema pyriforme	Y	E
Georgia	Clams	Ovate Clubshell	Pleurobema perovatum	Y	E
Georgia	Clams	Purple Bankclimber (mussel)	Elliptoideus sloatianus	Y	T
Georgia	Clams	Shinyrayed Pocketbook	Lampsilis subangulata	Y	E
Georgia	Clams	Southern Acornshell	Epioblasma otricaloogenus	Y	E
Georgia	Clams	Southern Clubshell	Pleurobema decisum	Y	E
Georgia	Clams	Southern Pigtoe	Pleurobema georgianum	Y	E
Georgia	Clams	Triangular Kidneyshell	Ptychobranchus greeni	Y	E
Georgia	Clams	Upland Combshell	Epioblasma metastriata	Y	E
Georgia	Conifers and Cycads	Florida Torreya	Torreya taxifolia	N	E
Georgia	Ferns and Allies	Black Spored Quillwort	Isoetes melanospora	N	E
Georgia	Fishes	Atlantic Sturgeon	Acipenser oxyrinchus oxyrinchus	N	E
Georgia	Fishes	Atlantic Sturgeon (gulf Subspecies)	Acipenser oxyrinchus (=oxyrhynchus) desotoi	N	T
Georgia	Fishes	Blue Shiner	Cyprinella caerulea	N	T
Georgia	Fishes	Cherokee Darter	Etheostoma scotti	N	T
Georgia	Fishes	Etowah Darter	Etheostoma etowahae	N	E
Georgia	Fishes	Pallid Sturgeon	Scaphirhynchus albus	N	E
Georgia	Fishes	Pearl Darter	Percina aurora	N	C
Georgia	Fishes	Snail Darter	Percina tanasi	N	T
Georgia	Flowering Plants	Alabama Leather Flower	Clematis socialis	N	E
Georgia	Flowering Plants	American Chaffseed	Schwalbea americana	N	E
Georgia	Flowering Plants	Canby's Dropwort	Oxypolis canbyi	N	E
Georgia	Flowering Plants	Cooley's Meadowrue	Thalictrum cooleyi	N	E
Georgia	Flowering Plants	Fringed Campion	Silene polypetala	N	E
Georgia	Flowering Plants	Georgia Rockcress	Arabis georgiana	Y	T
Georgia	Flowering Plants	Harperella	Ptilimnium nodosum	N	E
Georgia	Flowering Plants	Large-flowered Skullcap	Scutellaria montana	N	T
Georgia	Flowering Plants	Little Amphianthus	Amphianthus pusillus	N	T
Georgia	Flowering Plants	Michaux's Sumac	Rhus michauxii	N	E
Georgia	Flowering Plants	Mohr's Barbara's Buttons	Marshallia mohrii	N	T

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State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Georgia	Flowering Plants	Pondberry	Lindera melissifolia	N	E
Georgia	Flowering Plants	Relict Trillium	Trillium reliquum	N	E
Georgia	Flowering Plants	Small Whorled Pogonia	Isotria medeoloides	N	T
Georgia	Flowering Plants	Smooth Coneflower	Echinacea laevigata	N	E
Georgia	Flowering Plants	Tennessee Yellow-eyed Grass	Xyris tennesseensis	N	E
Georgia	Flowering Plants	Virginia Spiraea	Spiraea virginiana	N	T
Georgia	Flowering Plants	White Fringeless Orchid	Platanthera integrilabia	N	PT
Georgia	Flowering Plants	Whorled Sunflower	Helianthus verticillatus	N	E
Georgia	Mammals	Gray Bat	Myotis grisescens	N	E
Georgia	Mammals	Indiana Bat	Myotis sodalis	N	E
Georgia	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Georgia	Reptiles	Eastern Indigo Snake	Drymarchon corais couperi	N	T
Georgia	Reptiles	Gopher Tortoise	Gopherus polyphemus	N	T
Georgia	Reptiles	Yellow-blotched Map Turtle	Graptemys flavimaculata	N	T
Georgia	Snails	Interrupted (=georgia) Rocksnail	Leptoxis foremani	Y	E
North Carolina	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
North Carolina	Clams	Carolina Heelsplitter	Lasmigona decorata	N	E
North Carolina	Clams	Dwarf Wedgemussel	Alasmidonta heterodon	N	E
North Carolina	Clams	James Spinymussel	Pleurobema collina	N	E
North Carolina	Clams	Tar River Spinymussel	Elliptio steinstansana	N	E
North Carolina	Fishes	Cape Fear Shiner	Notropis mekistocholas	N	E
North Carolina	Fishes	Roanoke Logperch	Percina rex	N	E
North Carolina	Flowering Plants	American Chaffseed	Schwalbea americana	N	E
North Carolina	Flowering Plants	Dwarf-flowered Heartleaf	Hexastylis naniflora	N	T
North Carolina	Flowering Plants	Harperella	Ptilimnium nodosum	N	E
North Carolina	Flowering Plants	Little Amphianthus	Amphianthus pusillus	N	T
North Carolina	Flowering Plants	Michaux's Sumac	Rhus michauxii	N	E
North Carolina	Flowering Plants	Pondberry	Lindera melissifolia	N	E
North Carolina	Flowering Plants	Rough-leaved Loosestrife	Lysimachia asperulaefolia	N	E
North Carolina	Flowering Plants	Schweinitz's Sunflower	Helianthus schweinitzii	N	E
North Carolina	Flowering Plants	Small Whorled Pogonia	Isotria medeoloides	N	T
North Carolina	Flowering Plants	Small-anthered Bittercress	Cardamine micranthera	N	E
North Carolina	Flowering Plants	Smooth Coneflower	Echinacea laevigata	N	E
North Carolina	Insects	Saint Francis' Satyr Butterfly	Neonympha mitchellii francisci	N	E
North Carolina	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
North Carolina	Reptiles	American Alligator	Alligator mississippiensis	N	SA(T)
South Carolina	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
South Carolina	Birds	Wood Stork	Mycteria americana	N	T
South Carolina	Clams	Carolina Heelsplitter	Lasmigona decorata	Y	E
South Carolina	Fishes	Atlantic Sturgeon	Acipenser oxyrinchus oxyrinchus	N	E
South Carolina	Fishes	Shortnose Sturgeon	Acipenser brevirostrum	N	E
South Carolina	Flowering Plants	Bunched Arrowhead	Sagittaria fasciculata	N	E
South Carolina	Flowering Plants	Dwarf-flowered Heartleaf	Hexastylis naniflora	N	T
South Carolina	Flowering Plants	Harperella	Ptilimnium nodosum	N	E

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ENVIRONMENTALLY SENSITIVE AREAS

State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
South Carolina	Flowering Plants	Little Amphianthus	Amphianthus pusillus	N	T
South Carolina	Flowering Plants	Miccosukee Gooseberry	Ribes echinellum	N	T
South Carolina	Flowering Plants	Mountain Sweet Pitcher-plant	Sarracenia rubra ssp. jonesii	N	E
South Carolina	Flowering Plants	Relict Trillium	Trillium reliquum	N	E
South Carolina	Flowering Plants	Schweinitz's Sunflower	Helianthus schweinitzii	N	E
South Carolina	Flowering Plants	Small Whorled Pogonia	Isotria medeoloides	N	T
South Carolina	Flowering Plants	Smooth Coneflower	Echinacea laevigata	N	E
South Carolina	Flowering Plants	Swamp Pink	Helonias bullata	N	T
South Carolina	Flowering Plants	White Fringeless Orchid	Platanthera integrilabia	N	PT
South Carolina	Flowering Plants	White Irisette	Sisyrinchium dichotomum	N	E
South Carolina	Lichens	Rock Gnome Lichen	Gymnoderma lineare	N	E
South Carolina	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
South Carolina	Reptiles	Bog (=muhlenberg) Turtle	Clemmys muhlenbergii	N	SA(T)
South Carolina	Reptiles	Gopher Tortoise	Gopherus polyphemus	N	C
Tennessee	Clams	Cumberland Bean (pearlymussel)	Villosa trabalis	N	E
Tennessee	Clams	Cumberland Elktoe	Alasmidonta atropurpurea	N	E
Tennessee	Clams	Cumberland Pigtoe	Pleurobema gibberum	N	E
Tennessee	Clams	Cumberlandian Combshell	Epioblasma brevidens	N	E
Tennessee	Clams	Dromedary Pearlymussel	Dromus dromas	N	E
Tennessee	Clams	Fanshell	Cyprogenia stegaria	N	E
Tennessee	Clams	Finerayed Pigtoe	Fusconaia cuneolus	N	E
Tennessee	Clams	Littlewing Pearlymussel	Pegias fabula	N	E
Tennessee	Clams	Orangefoot Pimpleback (pearlymussel)	Plethobasus cooperianus	N	E
Tennessee	Clams	Pale Lilliput (pearlymussel)	Toxolasma cylindrellus	N	E
Tennessee	Clams	Pink Mucket (pearlymussel)	Lampsilis abrupta	N	E
Tennessee	Clams	Ring Pink (mussel)	Obovaria retusa	N	E
Tennessee	Clams	Rough Pigtoe	Pleurobema plenum	N	E
Tennessee	Clams	Slabside Pearlymussel	Pleuronaia dolabelloides	Y	E
Tennessee	Clams	Spectaclecase (mussel)	Cumberlandia monodonta	N	E
Tennessee	Clams	Tubercled Blossom (pearlymussel)	Epioblasma torulosa torulosa	N	E
Tennessee	Clams	Turgid Blossom (pearlymussel)	Epioblasma turgidula	N	E
Tennessee	Crustaceans	Nashville Crayfish	Orconectes shoupi	N	E
Tennessee	Ferns and Allies	American Hart's-tongue Fern	Asplenium scolopendrium var. americanum	N	T
Tennessee	Fishes	Bluemask (=jewel) Darter	Etheostoma sp.	N	E
Tennessee	Fishes	Boulder Darter	Etheostoma wapiti	N	EP, NE
Tennessee	Fishes	Duskytail Darter	Etheostoma percnurum	N	E
Tennessee	Fishes	Laurel Dace	Chrosomus saylori	N	E
Tennessee	Fishes	Snail Darter	Percina tanasi	N	T
Tennessee	Flowering Plants	Braun's Rock-cress	Arabis perstellata	N	E
Tennessee	Flowering Plants	Guthrie's (=pyne's) Ground-plum	Astragalus bibullatus	N	E

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State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Tennessee	Flowering Plants	Large-flowered Skullcap	Scutellaria montana	N	T
Tennessee	Flowering Plants	Leafy Prairie-clover	Dalea foliosa	N	E
Tennessee	Flowering Plants	Morefield's Leather Flower	Clematis morefieldii	N	E
Tennessee	Flowering Plants	Price's Potato-bean	Apios priceana	N	T
Tennessee	Flowering Plants	Short's Bladderpod	Physaria globosa	N	E
Tennessee	Flowering Plants	Small Whorled Pogonia	Isotria medeoloides	N	T
Tennessee	Flowering Plants	Virginia Spiraea	Spiraea virginiana	N	T
Tennessee	Flowering Plants	White Fringeless Orchid	Platanthera integrilabia	N	PT
Tennessee	Mammals	Carolina Northern Flying Squirrel	Glaucomys sabrinus coloratus	N	E
Tennessee	Mammals	Gray Bat	Myotis grisescens	N	E
Tennessee	Mammals	Indiana Bat	Myotis sodalis	N	E
Tennessee	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Tennessee	Snails	Anthony's Riversnail	Athearnia anthonyi	N	EP NE/E
Tennessee	Snails	Royal Marstonia (snail)	Pyrgulopsis ogmorhaphe	N	E
Virginia	Fishes	Roanoke Logperch	Percina rex	N	E
Virginia	Mammals	Gray Bat	Myotis grisescens	N	E
Virginia	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Black Warrior River	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
Black Warrior River	Birds	Wood Stork	Mycteria americana	N	T
Black Warrior River	Clams	Alabama (=inflated) Heelsplitter	Potamilus inflatus	N	T
Black Warrior River	Clams	Alabama Moccasinshell	Medionidus acutissimus	N	T
Black Warrior River	Clams	Heavy Pigtoe	Pleurobema taitianum	N	E
Black Warrior River	Clams	Orangenacre Mucket	Lampsilis perovalis	N	T
Black Warrior River	Clams	Ovate Clubshell	Pleurobema perovatum	N	E
Black Warrior River	Clams	Southern Clubshell	Pleurobema decisum	N	E
Black Warrior River	Flowering Plants	Georgia Rockcress	Arabis georgiana	N	T
Black Warrior River	Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	N	E
Black Warrior River	Northern Long-eared Bat	Northern Long-eared Bat	Myotis septentrionalis	N	T
Cahaba River	Amphibians	Black Warrior Waterdog	Necturus alabamensis	N	C
Cahaba River	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
Cahaba River	Birds	Wood Stork	Mycteria americana	N	T
Cahaba River	Clams	Alabama (=inflated) Heelsplitter	Potamilus inflatus	N	T
Cahaba River	Clams	Alabama Moccasinshell	Medionidus acutissimus	Y	T
Cahaba River	Clams	Coosa Moccasinshell	Medionidus parvulus	N	E
Cahaba River	Clams	Dark Pigtoe	Pleurobema furvum	N	E
Cahaba River	Clams	Fineline Pocketbook	Lampsilis altilis	Y	T

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ENVIRONMENTALLY SENSITIVE AREAS

State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Cahaba River	Clams	Heavy Pigtoe	Pleurobema taitianum	N	E
Cahaba River	Clams	Orangenacre Mucket	Lampsilis perovalis	Y	T
Cahaba River	Clams	Ovate Clubshell	Pleurobema perovatum	Y	E
Cahaba River	Clams	Southern Acornshell	Epioblasma othaloogensis	Y	E
Cahaba River	Clams	Southern Clubshell	Pleurobema decisum	Y	E
Cahaba River	Clams	Southern Pigtoe	Pleurobema georgianum	N	E
Cahaba River	Clams	Triangular Kidneyshell	Ptychobranchus greenii	Y	E
Cahaba River	Clams	Upland Combshell	Epioblasma metastriata	Y	E
Cahaba River	Fishes	Alabama Sturgeon	Scaphirhynchus suttkusi	Y	E
Cahaba River	Fishes	Cahaba Shiner	Notropis cahabae	N	E
Cahaba River	Fishes	Goldline Darter	Percina aurolineata	N	T
Cahaba River	Flowering Plants	Alabama Canebrake Pitcher-plant	Sarracenia rubra ssp. alabamensis	N	E
Cahaba River	Flowering Plants	Gentian Pinkroot	Spigelia gentianoides	N	E
Cahaba River	Flowering Plants	Georgia Rockcress	Arabis georgiana	Y	T
Cahaba River	Flowering Plants	Mohr's Barbara's Buttons	Marshallia mohrii	N	T
Cahaba River	Flowering Plants	Price's Potato-bean	Apios priceana	N	T
Cahaba River	Flowering Plants	Tennessee Yellow-eyed Grass	Xyris tennesseensis	N	E
Cahaba River	Flowering Plants	White Fringeless Orchid	Platanthera integrilabia	N	PT
Cahaba River	Insects	Mitchell's Satyr Butterfly	Neonympha mitchellii mitchellii	N	E
Cahaba River	Mammals	Gray Bat	Myotis grisescens	N	E
Cahaba River	Mammals	Indiana Bat	Myotis sodalis	N	E
Cahaba River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Cahaba River	Reptiles	Flattened Musk Turtle	Sternotherus depressus	N	T
Cahaba River	Snails	Cylindrical Lioplax (snail)	Lioplax cyclostomaformis	N	E
Cahaba River	Snails	Flat Pebblesnail	Lepyrium showalteri	N	E
Cahaba River	Snails	Painted Rocksnail	Leptoxis taeniata	N	T
Cahaba River	Snails	Rough Hornsnail	Pleurocera foremani	N	E
Cahaba River	Snails	Round Rocksnail	Leptoxis ampla	N	T
Cahaba River	Snails	Tulotoma Snail	Tulotoma magnifica	N	T
Catawba River	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
Catawba River	Clams	Carolina Heelsplitter	Lasmigona decorata	N	E
Catawba River	Ferns and Allies	Black Spored Quillwort	Isoetes melanospora	N	E
Catawba River	Flowering Plants	Dwarf-flowered Heartleaf	Hexastylis nanifora	N	T
Catawba River	Flowering Plants	Little Amphianthus	Amphianthus pusillus	N	T
Catawba River	Flowering Plants	Michaux's Sumac	Rhus michauxii	N	E
Catawba River	Flowering Plants	Schweinitz's Sunflower	Helianthus schweinitzii	N	E
Catawba River	Flowering Plants	Smooth Coneflower	Echinacea laevigata	N	E
Catawba River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Chattahoochee River	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
Chattahoochee River	Clams	Fineline Pocketbook	Lampsilis altilis	N	T
Chattahoochee River	Clams	Gulf Moccasinshell	Medionidus penicillatus	N	E
Chattahoochee River	Clams	Oval Pigtoe	Pleurobema pyriforme	N	E

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State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Chattahoochee River	Clams	Purple Bankclimber (mussel)	Elliptoideus sloatianus	N	T
Chattahoochee River	Clams	Shinyrayed Pocketbook	Lampsilis subangulata	N	E
Chattahoochee River	Ferns and Allies	Black Spored Quillwort	Isoetes melanospora	N	E
Chattahoochee River	Flowering Plants	Georgia Rockcress	Arabis georgiana	N	T
Chattahoochee River	Flowering Plants	Little Amphianthus	Amphianthus pusillus	N	T
Chattahoochee River	Flowering Plants	Michaux's Sumac	Rhus michauxii	N	E
Chattahoochee River	Flowering Plants	White Fringeless Orchid	Platanthera integrilabia	N	PT
Chattahoochee River	Mammals	Gray Bat	Myotis grisescens	N	E
Chattahoochee River	Mammals	Indiana Bat	Myotis sodalis	N	E
Chattahoochee River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Cumberland River	Birds	Least Tern	Sterna antillarum	N	E
Cumberland River	Clams	Clubshell	Pleurobema clava	N	E
Cumberland River	Clams	Cumberlandian Combshell	Epioblasma brevidens	N	E
Cumberland River	Clams	Fanshell	Cyprogenia stegaria	N	E
Cumberland River	Clams	Fat Pocketbook	Potamilus capax	N	E
Cumberland River	Clams	Fluted Kidneyshell	Ptychobranchus subtentum	N	E
Cumberland River	Clams	Orangefoot Pimpleback (pearlymussel)	Plethobasus cooperianus	N	E
Cumberland River	Clams	Pink Mucket (pearlymussel)	Lampsilis abrupta	N	E
Cumberland River	Clams	Rabbitsfoot	Quadrula cylindrica cylindrica	Y	T
Cumberland River	Clams	Ring Pink (mussel)	Obovaria retusa	N	E
Cumberland River	Clams	Rough Pigtoe	Pleurobema plenum	N	E
Cumberland River	Clams	Sheepnose Mussel	Plethobasus cyphyus	N	E
Cumberland River	Clams	Slabside Pearlymussel	Pleuronaia dolabelloides	N	E
Cumberland River	Clams	Spectaclecase (mussel)	Cumberlandia monodonta	N	E
Cumberland River	Clams	Tan Riffleshell	Epioblasma florentina walkeri (=E. walkeri)	N	E

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State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Cumberland River	Flowering Plants	Braun's Rock-cress	Arabis perstellata	N	E
Cumberland River	Flowering Plants	Guthrie's (=pyne's) Ground-plum	Astragalus bibullatus	N	E
Cumberland River	Flowering Plants	Leafy Prairie-clover	Dalea foliosa	N	E
Cumberland River	Flowering Plants	Price's Potato-bean	Apios priceana	N	T
Cumberland River	Flowering Plants	Short's Bladderpod	Physaria globosa	Y	E
Cumberland River	Mammals	Gray Bat	Myotis grisescens	N	E
Cumberland River	Mammals	Indiana Bat	Myotis sodalis	N	E
Cumberland River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Dan River	Fishes	Roanoke Logperch	Roanoke Logperch	N	E
Dan River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Flint River	Amphibians	Reticulated Flatwoods Salamander	Ambystoma bishopi	N	E
Flint River	Amphibians	Striped Newt	Notophthalmus perstriatus	N	C
Flint River	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
Flint River	Birds	Wood Stork	Mycteria americana	N	T
Flint River	Clams	Fat Threeridge (mussel)	Amblema neislerni	Y	E
Flint River	Clams	Gulf Moccasinshell	Medionidus penicillatus	Y	E
Flint River	Clams	Oval Pigtoe	Pleurobema pyriforme	Y	E
Flint River	Clams	Purple Bankclimber (mussel)	Elliptoideus sloatianus	Y	T
Flint River	Clams	Shinyrayed Pocketbook	Lampsilis subangulata	Y	E
Flint River	Conifers and Cycads	Florida Torreya	Torreya taxifolia	N	E
Flint River	Flowering Plants	American Chaffseed	Schwalbea americana	N	E
Flint River	Flowering Plants	Cooley's Meadowrue	Thalictrum cooleyi	N	E
Flint River	Flowering Plants	Pondberry	Lindera melissifolia	N	E
Flint River	Flowering Plants	Relict Trillium	Trillium reliquum	N	E
Flint River	Reptiles	Eastern Indigo Snake	Drymarchon corais couperi	N	T
Flint River	Reptiles	Gopher Tortoise	Gopherus polyphemus	N	C
Oconee River	Ferns and Allies	Black Spored Quillwort	Isoetes melanospora	N	E
Oconee River	Flowering Plants	Harperella	Ptilimnium nodosum	N	E
Oconee River	Flowering Plants	Little Amphianthus	Amphianthus pusillus	N	T
Savannah River	Amphibians	Frosted Flatwoods Salamander	Ambystoma cingulatum	N	T
Savannah River	Amphibians	Striped Newt	Notophthalmus perstriatus	N	C
Savannah River	Birds	Kirtland's Warbler	Setophaga kirtlandii (= Dendroica kirtlandii)	N	E
Savannah River	Birds	Piping Plover	Charadrius melodus	N	T

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State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Savannah River	Birds	Red-cockaded Woodpecker	Picoides borealis	N	E
Savannah River	Birds	Wood Stork	Mycteria americana	N	T
Savannah River	Clams	Carolina Heelsplitter	Lasmigona decorata	Y	E
Savannah River	Ferns and Allies	Mat-forming Quillwort	Isoetes tegetiformans	N	E
Savannah River	Fishes	Atlantic Sturgeon	Acipenser oxyrinchus oxyrinchus	N	E
Savannah River	Fishes	Shortnose Sturgeon	Acipenser brevirostrum	N	E
Savannah River	Flowering Plants	American Chaffseed	Schwalbea americana	N	E
Savannah River	Flowering Plants	Canby's Dropwort	Oxypolis canbyi	N	E
Savannah River	Flowering Plants	Harperella	Ptilimnium nodosum	N	E
Savannah River	Flowering Plants	Little Amphianthus	Amphianthus pusillus	N	T
Savannah River	Flowering Plants	Miccosukee Gooseberry	Ribes echinellum	N	T
Savannah River	Flowering Plants	Michaux's Sumac	Rhus michauxii	N	E
Savannah River	Flowering Plants	Pondberry	Lindera melissifolia	N	E
Savannah River	Flowering Plants	Relict Trillium	Trillium reliquum	N	E
Savannah River	Flowering Plants	Smooth Coneflower	Echinacea laevigata	N	E
Savannah River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Savannah River	Mammals	West Indian Manatee	Trichechus manatus	N	E
Savannah River	Reptiles	Eastern Indigo Snake	Drymarchon corais couperi	N	T
Savannah River	Reptiles	Gopher Tortoise	Gopherus polyphemus	N	C
Savannah River	Reptiles	Green Sea Turtle	Chelonia mydas	N	T
Savannah River	Reptiles	Kemp's Ridley Sea Turtle	Lepidochelys kempii	N	E
Savannah River	Reptiles	Leatherback Sea Turtle	Dermochelys coriacea	N	E
Staunton River	Flowering Plants	Harperella	Ptilimnium nodosum	N	E
Staunton River	Flowering Plants	Smooth Coneflower	Echinacea laevigata	N	E
Staunton River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Tennessee River	Amphibians	Black Warrior Waterdog	Necturus alabamensis	N	C
Tennessee River	Clams	Alabama Lampmussel	Lampsilis virescens	N	E
Tennessee River	Clams	Alabama Moccasinshell	Medionidus acutissimus	N	T
Tennessee River	Clams	Appalachian Monkeyface (pearlymussel)	Quadrula sparsa	N	EP,NE
Tennessee River	Clams	Cracking Pearlymussel	Hemistena lata	N	EP,NE / E
Tennessee River	Clams	Cumberland Bean (pearlymussel)	Villosa trabalis	N	EP,NE / E
Tennessee River	Clams	Cumberlandian Combshell	Epioblasma brevidens	N	EP,NE
Tennessee River	Clams	Dromedary Pearlymussel	Dromus dromas	N	EP,NE / E
Tennessee River	Clams	Fanshell	Cyprogenia stegaria	N	EP, NE / E
Tennessee River	Clams	Finelined Pocketbook	Lampsilis altilis	N	T
Tennessee River	Clams	Fineraayed Pigtoe	Fusconaia cuneolus	N	EP,NE / E

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ENVIRONMENTALLY SENSITIVE AREAS

State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Tennessee River	Clams	Orangefoot Pimpleback (pearlymussel)	Plethobasus cooperianus	N	EP,NE / E
Tennessee River	Clams	Orangenacre Mucket	Lampsilis perovalis	N	T
Tennessee River	Clams	Ovate Clubshell	Pleurobema perovatum	N	E
Tennessee River	Clams	Oyster Mussel	Epioblasma capsaeformis	N	EP,NE / E
Tennessee River	Clams	Pale Lilliput (pearlymussel)	Toxolasma cylindrellus	N	E
Tennessee River	Clams	Pink Mucket (pearlymussel)	Lampsilis abrupta	N	E
Tennessee River	Clams	Purple Bean	Villosa perpurpurea	N	E
Tennessee River	Clams	Rabbitsfoot	Quadrula cylindrica cylindrica	Y	T
Tennessee River	Clams	Ring Pink (mussel)	Obovaria retusa	N	EP,NE / E
Tennessee River	Clams	Rough Pigtoe	Pleurobema plenum	N	EP,NE / E
Tennessee River	Clams	Rough Rabbitsfoot	Quadrula cylindrica strigillata	N	E
Tennessee River	Clams	Sheepnose Mussel	Plethobasus cyphyus	N	E
Tennessee River	Clams	Shiny Pigtoe	Fusconaia cor	N	EP,NE / E
Tennessee River	Clams	Slabside Pearlymussel	Pleuronaia dolabeloides	Y	E
Tennessee River	Clams	Snuffbox Mussel	Epioblasma triquetra	N	E
Tennessee River	Clams	Southern Clubshell	Pleurobema decisum	N	E
Tennessee River	Clams	Spectaclecase (mussel)	Cumberlandia monodonta	N	E
Tennessee River	Clams	Triangular Kidneyshell	Ptychobranchus greenii	N	E
Tennessee River	Clams	Tuberced Blossom (pearlymussel)	Epioblasma torulosa torulosa	N	E
Tennessee River	Clams	Turgid Blossom (pearlymussel)	Epioblasma turgidula	N	E
Tennessee River	Clams	Upland Combshell	Epioblasma metastriata	N	E
Tennessee River	Clams	White Wartyback (pearlymussel)	Plethobasus cicatricosus	N	EP,NE/ E
Tennessee River	Crustaceans	Alabama Cave Shrimp	Palaemonias alabamae	N	E
Tennessee River	Ferns and Allies	American Hart's-tongue Fern	Asplenium scolopendrium var. americanum	N	T

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State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Tennessee River	Fishes	Blue Shiner	Cyprinella caerulea	N	T
Tennessee River	Fishes	Duskytail Darter	Etheostoma percnurum	N	EP,N/E
Tennessee River	Fishes	Laurel Dace	Chrosomus saylori	Y	E
Tennessee River	Fishes	Palezone Shiner	Notropis albizonatus	N	E
Tennessee River	Fishes	Pygmy Madtom	Noturus stanauli	N	EP,NE
Tennessee River	Fishes	Rush Darter	Etheostoma phytophilum	N	E
Tennessee River	Fishes	Slackwater Darter	Etheostoma boschungi	N	T
Tennessee River	Fishes	Snail Darter	Percina tanasi	N	T
Tennessee River	Fishes	Spotfin Chub	Erimonax monachus	Y	EP,NE/T
Tennessee River	Flowering Plants	Cumberland Rosemary	Conradina verticillata	N	T
Tennessee River	Flowering Plants	Cumberland Sandwort	Arenaria cumberlandensis	N	E
Tennessee River	Flowering Plants	Green Pitcher-plant	Sarracenia oreophila	N	E
Tennessee River	Flowering Plants	Harperella	Ptilimnium nodosum	N	E
Tennessee River	Flowering Plants	Kral's Water-plantain	Sagittaria secundifolia	N	T
Tennessee River	Flowering Plants	Large-flowered Skullcap	Scutellaria montana	N	T
Tennessee River	Flowering Plants	Morefield's Leather Flower	Clematis morefieldii	N	E
Tennessee River	Flowering Plants	Price's Potato-bean	Apios priceana	N	T
Tennessee River	Flowering Plants	Small Whorled Pogonia	Isotria medeoloides	N	T
Tennessee River	Flowering Plants	Spreading Avens	Geum radiatum	N	E
Tennessee River	Flowering Plants	Virginia Spiraea	Spiraea virginiana	N	T
Tennessee River	Flowering Plants	White Fringeless Orchid	Platanthera integrilabia	N	PT
Tennessee River	Mammals	Carolina Northern Flying Squirrel	Glaucomys sabrinus coloratus	N	E
Tennessee River	Mammals	Gray Bat	Myotis grisescens	N	E
Tennessee River	Mammals	Indiana Bat	Myotis sodalis	N	E
Tennessee River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T

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State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status
Tennessee River	Reptiles	Flattened Musk Turtle	Sternotherus depressus	N	T
Tennessee River	Snails	Anthony's Riversnail	Athearnia anthonyi	N	EP,NE/ E
Tennessee River	Snails	Armored Snail	Pyrgulopsis (=Marstonia) pachyta	N	E
Tennessee River	Snails	Royal Marstonia (snail)	Pyrgulopsis ogmorhaphe	N	E
Tennessee River	Snails	Slender Campeloma	Campeloma decampi	N	E
Tennessee River	Critical Habitat (b)	Fluted Kidneyshell	Ptychobranchus subtentum	Y	-
Tombigbee River	Birds	Wood Stork	Mycteria americana	N	T
Tombigbee River	Clams	Alabama (=Inflated) Heelsplitter	Potamilus inflatus	N	T
Tombigbee River	Clams	Alabama Moccasinshell	Medionidus acutissimus	Y	T
Tombigbee River	Clams	Heavy Pigtoe	Pleurobema taitianum	N	E
Tombigbee River	Clams	Orangenacre Mucket	Lampsilis perovalis	Y	T
Tombigbee River	Clams	Ovate Clubshell	Pleurobema perovatum	Y	E
Tombigbee River	Clams	Southern Clubshell	Pleurobema decisum	Y	E
Tombigbee River	Fishes	Alabama Sturgeon	Scaphirhynchus suttkusi	N	E
Tombigbee River	Fishes	Atlantic Sturgeon (gulf Subspecies)	Acipenser oxyrinchus (=oxrythynchus) desotoi	N	T
Tombigbee River	Flowering Plants	Georgia Rockcress	Arabis georgiana	Y	T
Tombigbee River	Mammals	Northern Long-eared Bat	Myotis septentrionalis	N	T
Tombigbee River	Reptiles	Black Pine Snake	Pituophis melanoleucus lodingi	N	T
Tombigbee River	Reptiles	Eastern Indigo Snake	Drymarchon corais couperi	N	T
Tombigbee River	Reptiles	Gopher Tortoise	Gopherus polyphemus	N	C/T

Notes:

C	Candidate
E	Endangered
EP, NE	Experimental Population, Non-Essential. Specific reintroduced populations of listed species. A "nonessential" designation for an experimental population means that, on the basis of the best available information, the experimental population is not essential for the continued existence of that species. A species may be a listed species (threatened, candidate, or endangered) elsewhere except where it is listed as an experimental population.
PT	Proposed Threatened
SA(T)	Similarity of Appearance (Threatened)

State or River	Category	Common Name	Scientific Name	Critical Habitat (Y/N) (a)	Status

T Threatened

(a) Although there may be critical habitats designated for this species, this column refers to if there are critical habitats designated for this species in this location.

(b) The species was not listed as being threatened or endangered at this location but critical habitat for this species was designated in this location

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ENVIRONMENTALLY SENSITIVE AREAS

Additional agency resources to identify environmental and economic sensitive areas can be found in the following table:

Emergency Response Resource Websites		
Resource	**Contents**	**Document Link/Navigation Instructions**
EPA		
SERC Database for LEPCs	EPA's list of state emergency response contacts (SERC)	http://www.epa.gov/osweroe1/content/epcra/serc_contacts.htm
EJMapper	Interactive map of facilities that report to EPA (including NPDES Permit holders), water bodies, governmental jurisdictions, demographics (populations, economics, etc.), land cover, etc.	http://www.epa.gov/environmentaljustice/mapper/index.html
EPA OSC Website	EPA's clearinghouse of useful information for On-Scene Coordinators (H&S information, Equipment and Supply Vendors, Training Providers, etc.)	http://www.epaosc.org/default.aspx
EPA NEPAassist Website	Interactive map of facilities that report to EPA (including NPDES Permit holders), water bodies, governmental jurisdictions, demographics (populations, economics, etc.), land cover, etc.	http://134.67.99.123/nepassist/entry.aspx
FEMA		
NIMS Resource Center	FEMA's NIMS information clearinghouse that includes guidance documents, training materials and related resources	http://www.fema.gov/emergency/nims/index.shtm
NOAA		
Oil Spill Responder Tools and Resources	Link to multiple resources to assist oil spill responders such as trajectory/weathering/dispersion models, Environmental Sensitivity Index maps, ICS forms and job aids, SCAT and Aerial Recon job aids	http://response.restoration.noaa.gov/oil-and-chemical-spills/chemical-spills/response-tools/guide-responder-tools.html
OHSA		
Oil Spill Response Worker Protection Website	OSHA requirements and guidance for ensuring the protection of oil spill cleanup activities	http://www.osha.gov/oilspills/index.html
Incident Command System eTool Website	OSHA's ICS information clearinghouse that includes guidance documents, training materials and related resources	http://www.osha.gov/SLTC/etools/ics/index.html

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ENVIRONMENTALLY SENSITIVE AREAS

PHMSA		
National Pipeline Mapping System	PHMSA's Pipeline Information Management Mapping Application (PIMMA). Persons must apply to PHMSA for access to Interactive Map	https://www.npms.phmsa.dot.gov/
National Pipeline Mapping System Downloads	PIMMA download site which includes the following GIS datasets: Pipeline Data, Unusually Sensitive Area Data, Population Data, Basemap Data, Commercially Navigable Waterways and Natural Disaster Data	https://www.npms.phmsa.dot.gov/application.asp?factrData&page=subapp.asp?appndata&actrdata.reg
Regional Response Teams		
Regional Response Team Website Links	Link to the 13 Regional Response Team Websites, which often include information such as the Regional/Geographic Response Plans	http://www.rrt.nrt.org/
USCG		
USCG Homeport	Homepage that provides links to all USCG Ports/Sectors and public-access versions of the Area Contingency Plans	https://homeport.uscg.mil/mycg/portal/ep/home.do
USDA		
Web Soil Survey	Interactive Map and downloadable GIS data that provide information about soil characteristics	http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm
USFWS		
USFWS Critical Habitat for Threatened and Endangered Species	Interactive Map and downloadable GIS data that identifies areas that are designated as Critical Habitat and Threatened or Endangered Species by State and County	http://criticalhabitat.fws.gov/crithab/
National Wetlands Inventory	Interactive Map and downloadable GIS data that identifies areas that are designated as wetlands by the USFWS	http://www.fws.gov/wetlands/data/

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

USGS		
USGS Surface-Water Data for the Nation	Database used to track water levels, discharge rates, rainfall and surface water quality at over 850,000 stations in the United States.	http://waterdata.usgs.gov/nwis/sw
USGS Watershed Data for Google Earth	Downloadable Google Earth Watershed/Water Feature overlay maps for the United States	http://echo.usgs.gov/watersheds/kml_index.html
Juice Analytics for Google Earth		
Census Data	Census Data/Population Density for Google Earth by county or block in each state	http://www.juiceanalytics.com/writing/census-data-in-google-earth/
US Census Bureau		
Census Data	Census Data/Population Density	http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Colonial Pipeline Company

WATER INTAKE LOCATIONS – RESPONSE ZONE 802

MUNICIPALITY OR OWNER	ID# on USGS MAP	PHONE NUMBER	STATE	USGS MAP#	WATER CROSSING	DRINK WATER INTAKE	IND. WATER INTAKE	LATITUDE (DEG/MIN/ SEC)	LONGITUDE (DEG/MIN/ SEC)	BOOM ON HAND?
(b) (3), (b) (7)(F) [redacted]		(b) (3), (b) (7)(F) [redacted]	GA	(b) (3), (b) (7)(F) [redacted]	(b) (3), (b) (7)(F) [redacted]	X		(b) (3), (b) (7)(F) [redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X				Yes
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		(b) (3), (b) (7)(F)	[redacted]	No
[redacted]		[redacted]		[redacted]	[redacted]					No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		(b) (3), (b) (7)(F) [redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]	(b) [redacted]	[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No
[redacted]		[redacted]	GA	[redacted]	[redacted]	X		[redacted]		No

Colonial Pipeline Company

WATER INTAKE LOCATIONS – RESPONSE ZONE 802

MUNICIPALITY OR OWNER	ID# on USGS MAP	PHONE NUMBER	STATE	USGS MAP#	WATER CROSSING	DRINK WATER INTAKE	IND. WATER INTAKE	LATITUDE (DEG/MIN/ SEC)	LONGITUDE (DEG/MIN/ SEC)	BOOM ON HAND?
(b) (3), (b) (7)(F) [redacted]		(b) (3), (b) (7)(F) [redacted]	GA	(b) (3), (b) (7)(F) [redacted]	(b) (3), (b) (7)(F) [redacted]	X		(b) (3), (b) (7)(F) [redacted]		No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				Yes
			GA			X				Yes
			GA			X				Yes
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No

Colonial Pipeline Company

WATER INTAKE LOCATIONS – RESPONSE ZONE 802

MUNICIPALITY OR OWNER	ID# on USGS MAP	PHONE NUMBER	STATE	USGS MAP#	WATER CROSSING	DRINK WATER INTAKE	IND. WATER INTAKE	LATITUDE (DEG/MIN/ SEC)	LONGITUDE (DEG/MIN/ SEC)	BOOM ON HAND?
(b) (3), (b) (7)(F) [redacted]		(b) (3), (b) (7)(F) [redacted]	GA	(b) (3), (b) (7)(F) [redacted]	(b) (3), (b) (7)(F) [redacted]	X		(b) (3), (b) (7)(F) [redacted]		No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
			GA			X				No
	(b) (3), (b) (7) [redacted]		GA			X				No
			GA			X				No
			TN				X			No
			TN				X			No
			TN				X			No
			TN			X				No
			TN				X			No
			TN				X			Yes

Colonial Pipeline Company

WATER INTAKE LOCATIONS – RESPONSE ZONE 802

MUNICIPALITY OR OWNER	ID# on USGS MAP	PHONE NUMBER	STATE	USGS MAP#	WATER CROSSING	DRINK WATER INTAKE	IND. WATER INTAKE	LATITUDE (DEG/MIN/ SEC)	LONGITUDE (DEG/MIN/ SEC)	BOOM ON HAND?
(b) (3), (b) (7)(F)		(b) (3), (b) (7)(F)	TN	(b) (3), (b) (7)(F)	(b) (3), (b) (7)(F)		X	(b) (3), (b) (7)(F)		No
			TN				X			No
			TN				X			No
			TN				X			No
			TN			X				No
			TN			X				No
			TN			X				Yes
			TN			X				No
			TN			X				No
			TN			X				No
			TN			X				No
			TN			X				No
	(b) (3), (b) (7)		TN			X				No
			TN				X			No
			TN			X				No
	(b) (3), (b) (7)		TN				X			No
			TN			X				No
			TN				X			No

Colonial Pipeline Company

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MUNICIPALITY OR OWNER	ID# on USGS MAP	PHONE NUMBER	STATE	USGS MAP#	WATER CROSSING	DRINK WATER INTAKE	IND. WATER INTAKE	LATITUDE (DEG/MIN/ SEC)	LONGITUDE (DEG/MIN/ SEC)	BOOM ON HAND?
(b) (3), (b) (7)(F) [redacted]		(b) (3), (b) (7)(F) [redacted]	TN	(b) (3), (b) (7)(F) [redacted]	(b) (3), (b) (7)(F) [redacted]		X	(b) (3), (b) (7)(F) [redacted]		No
			TN			X				No
			TN			X				Yes
			TN			X				No
			TN			X				No
			TN			X				No
			TN			X				No
			TN			X				No
			TN			X				No
			TN			X				No
			TN			X				No
			SC							No
			SC			X				No
			SC							No
			SC			X				No
			SC				X			No
			SC							No

Colonial Pipeline Company

WATER INTAKE LOCATIONS – RESPONSE ZONE 802

MUNICIPALITY OR OWNER	ID# on USGS MAP	PHONE NUMBER	STATE	USGS MAP#	WATER CROSSING	DRINK WATER INTAKE	IND. WATER INTAKE	LATITUDE (DEG/MIN/ SEC)	LONGITUDE (DEG/MIN/ SEC)	BOOM ON HAND?
(b) (3), (b) (7)(F)	(b) (3), (b) (7)(F)	(b) (3), (b) (7)(F)	NC	(b) (3), (b) (7)(F)	(b) (3), (b) (7)(F)		X	(b) (3), (b) (7)(F)		Yes
			NC			X				No
			NC				X			Yes
			NC			X				No
			NC			X				No
			NC				X			No
			NC			X				No
			NC			X				Yes
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
	(b) (3), (b) (7		NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
	(b) (3), (b)		NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
	(b) (3), (b) (7)(F		NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No

Colonial Pipeline Company

WATER INTAKE LOCATIONS – RESPONSE ZONE 802

MUNICIPALITY OR OWNER	ID# on USGS MAP	PHONE NUMBER	STATE	USGS MAP#	WATER CROSSING	DRINK WATER INTAKE	IND. WATER INTAKE	LATITUDE (DEG/MIN/ SEC)	LONGITUDE (DEG/MIN/ SEC)	BOOM ON HAND?
(b) (3), (b) (7)(F)		(b) (3), (b) (7)(F)	NC	(b) (3), (b) (7)(F)	(b) (3), (b) (7)(F)	X		(b) (3), (b) (7)(F)		No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
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			NC			X				Mo
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No

Colonial Pipeline Company

WATER INTAKE LOCATIONS – RESPONSE ZONE 802

MUNICIPALITY OR OWNER	ID# on USGS MAP	PHONE NUMBER	STATE	USGS MAP#	WATER CROSSING	DRINK WATER INTAKE	IND. WATER INTAKE	LATITUDE (DEG/MIN/ SEC)	LONGITUDE (DEG/MIN/ SEC)	BOOM ON HAND?
(b) (3), (b) (7)(F)		(b) (3), (b) (7)(F)	NC	(b) (3), (b) (7)(F)	(b) (3), (b) (7)(F)	X		(b) (3), (b) (7)(F)		No
			NC			X				No
	(b) (3), (b) (7		NC			X				No
			NC			X				No
	(b) (3), (b) (7		NC			X				No
			NC			X				No
			NC			X				Yes
			NC			X				No
	(b) (3), (b) (7		NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			NC			X				No
			VA			X				No
	(b) (3), (b) (7		VA				X			No
			VA			X				No
			VA			X				No
			AL			X				
			AL			X	X			
			AL			X				
			AL			X	X			
			AL			X				

U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

VIA CERTIFIED MAIL AND FAX TO: (678) 762-2466

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

OCT 13 2016

Re: CPF No. 2-2016-5005H

Dear Mr. Felt:

Enclosed is an Amended Corrective Action Order issued in the above-referenced case, requiring Colonial Pipeline Company to take certain corrective actions with respect to the failure on its Pipeline One (Line #1), that occurred on September 9, 2016, near Pelham, Alabama.

Service is being made by certified mail and facsimile. Service of the Amended Corrective Action Order by electronic transmission is deemed complete upon transmission and acknowledgement of receipt, or as otherwise provided under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon completion of service.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

Enclosure

cc: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, Office of Pipeline Safety, PHMSA
Mr. James Urisko, Regional Director, Southern Region, Office of Pipeline Safety, PHMSA

U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590

In the Matter of	)	
Colonial Pipeline Company,	)	**CPF No. 2-2016-5005H**
Respondent.	)	

AMENDED CORRECTIVE ACTION ORDER

Purpose and Background:

This Amended Corrective Action Order (Amended CAO) is being issued under the authority of 49 U.S.C. § 60112 to require Colonial Pipeline Company (Colonial or Respondent) to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with the recent failure on its Colonial's Pipeline One (Line #1).

On September 9, 2016, a reportable accident occurred on Colonial's Line #1, a hazardous liquid pipeline in Shelby County, Alabama, approximately three miles from the town of Pelham, Alabama (Failure). The Failure resulted in the release of approximately 7,370 barrels (Bbls) of gasoline into a pond (Pond #2) approximately 400 feet north of Colonial's Line #1. Line #1 transports gasoline from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a 202-mile section of Line #1 that runs from Collins, Mississippi, to Pelham, Alabama. Colonial operates a parallel pipeline that runs adjacent to Line #1, Pipeline Two (Line #2), that is approximately 40 feet apart from Line #1 at the Failure Site. Line #2 transports petroleum product from Epes, Alabama, to Anderson, South Carolina.

On September 16, 2016, PHMSA issued a Corrective Action Order (CAO) to Colonial. The CAO required Colonial to shut down failed section on Line #1 and carry out mechanical and metallurgical testing and failure analysis of the failed section of pipe. At the time, the location of the Failure and the extent of the environmental impact were unknown. This Amended

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Colonial operates roughly 5,500 miles of hazardous liquid transmission pipeline within the United States. The pipelines travel through the states of Texas, Louisiana, Mississippi, Alabama, Georgia, North and South Carolina, Virginia, Maryland, Pennsylvania, New Jersey, and New York. Branches from the main lines extend into Tennessee. The system delivers a daily average of approximately 100 million gallons of liquid petroleum products throughout the Southern and Eastern United States.

Corrective Action Order replaces and supersedes the CAO issued to Colonial on September 16, 2016.

Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the accident.

The preliminary findings in the Original CAO noted the failure and related information and details about the defect discovered as a result of the September 9, 2016 failure. Since that time, the following events have occurred and certain information has been discovered or clarified:

Amended Preliminary Findings:

1) Line #1 is a 36-inch diameter hazardous liquid pipeline that runs from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a segment of Line #1 that runs from Collins, Mississippi, to Respondent's Pelham Station, in Pelham, Alabama (Affected Segment). The Failure occurred at Station 5155+57 on a section of Line #1 that runs from Colonial's downstream Cahaba River block valve, near Station 5055+00, to Colonial's Pelham Station in Pelham, Alabama, near Station 5545+17. A pond (Pond #2) outside the company's right-of-way is approximately 460 feet from the Failure Site on Line #1 (Failure Site). Two other ponds are in the vicinity of the failed section: Pond #1 to the south of Line #1, and Pond #3 to the north of Pond #2. All referenced ponds are man-made reclamation and evaporation ponds used during historic rural surface strip mining.

2) The Affected Segment was constructed in 1963 and is composed of 36-inch diameter, 0.281-inch wall thickness, American Petroleum Institute (API) 5L, X52 pipe. The pipe generally has asphalt enamel coating and a double-submerged arc-welded (DSAW) seam type, and was manufactured by the National Tube Company. Several sections of the Affected Segment were subject to replacement and recoat projects since original construction, and may have more modern pipe and or types of coating.

3) Pond #2 is located near Station 5154+13, on Line #1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama. Pond #2 is bounded by Line #1 to the south and another pond, Pond #3, to the north. Pond #3 is also a man-made reclamation and evaporation pond used during historic rural surface strip mining.

4) From September 12-13, 2016, Colonial installed stopple fittings upstream and downstream of the Failure location in order to begin drain-down of the line before excavation of the release location. The downstream stopple was tapped and plugged and work continued on the upstream stopple installation. On September 14, 2016, the upstream stopple was completed at 1:30 AM CDT. Nitrogen injections began at 5:00 AM CDT and initial drain-up operations were completed that evening.

5) As of 8:00 AM CDT on September 15, 2016, Colonial personnel announced that sampling indicated the presence of dissolved constituents in Pond #3.

6) At approximately 12:30 PM CDT on September 16, 2016, Colonial officials announced that its personnel had discovered a culvert below the water line in Pond #2. Colonial officials further noted this culvert connects to Pond #3, and that they believe the dissolved constituents flowed from Pond #2, through this culvert, into Pond #3.

7) On September 16, 2016, the amount of product extracted from the pipe remained at 880 bbls. Adequate pressure to evacuate the product remaining in the stoppled section of the line could no longer be provided by injecting nitrogen into the line.

8) As of the 9:00 AM CDT on September 17, 2016, the amount of product extracted from the pipe was 1,073 bbls. Colonial installed a temporary pig launcher and receiver in order to use a pig to remove the remaining product. Colonial used water to push the pig to complete the product removal effort. There was no estimate on volume remaining in stoppled section of the pipe.

9) On September 20, 2016, PHMSA approved the installation of a 30-inch diameter temporary 500-foot bypass line on the Isolated Segment to facilitate limited pipeline operation of Line #1. Specifications of the bypass pipe are as follows:

   a. Grade (API): X52 and X60
   b. SMYS: 811.77 psi
   c. Wall thickness: 0.281-inch
   d. Coating: Fusion Bond Epoxy and Tremon Hot Wax
   e. Tie-in welds NDT method X-Ray.
   f. Upon startup of the bypass, the bypass has been operating at a 20% reduction from the highest steady-state pressure for the 90 days prior to shutdown of Line #1. This pressure reduction will remain in place throughout operation of the bypass.

10) On September 22, 2016, at 8:45 PM CDT, the temporary bypass reached full operational status. Due to the artificial lighting provided by Colonial, Director approved a non-daylight start in a supplemental letter, dated September 21, 2016. Colonial personnel are monitoring the security of the above-ground bypass at all times until the bypass is removed from service.

11) On September 28, 2016, Colonial started excavation of the failed section of Line #1. The failed section of Line #1 was excavated on September 29, 2016, around 1:00 PM CDT. A small crack was found on a buckle that had not been previously identified or known by Colonial. According to Colonial, the buckle had not been identified in the 2014 internal assessment or geometry data and, pending verification, was not present during a 2015 recoat project.

Determination of Necessity for Corrective Action Order and Right to Hearing:

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action, as appropriate. The bases for making the determination that a pipeline facility is or would be hazardous, requiring corrective action, is set forth both in the above-referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112 and the regulations promulgated thereunder provide for the issuance of a Corrective Action Order, without prior notice and opportunity for hearing, upon a finding that failure to issue the Order expeditiously would result in the likelihood of serious harm to life, property, or the environment. In such cases, an opportunity for a hearing and expedited review will be provided as soon as practicable after the issuance of this Order.

After evaluating the preliminary findings in the CAO and the foregoing additional preliminary findings of fact, I find that continued operation of the pipeline without corrective measures is or would be hazardous to life, property, or the environment. Additionally, I have considered the undetermined cause of the Failure and the ongoing investigation; the location of the Failure; the age of the pipeline and the history of known problems or failures on pipelines being owned and operated by Respondent; the proximity of the pipeline to populated areas or other unusually sensitive ecological areas; the deceased wildlife and vegetation near the Failure Site; and the soil and water contamination in the vicinity of the Failure Site. I therefore find that a failure to issue this Order expeditiously to require immediate corrective action would result in the likelihood of serious harm to life, property, or the environment.

Accordingly, this Amendment to the Corrective Action Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Amended Corrective Action Order are effective upon receipt.

The actions required by this Amended Corrective Action Order are in addition to the requirements that apply to under the CAO issued on September 16, 2016.

Within 10 days of receipt of this Order, Respondent may contest its issuance obtain expedited review either by answering in writing or requesting a hearing under 49 C.F.R. § 190.211, to be held as soon as practicable under the terms of such regulation, by notifying the Associate Administrator for Pipeline Safety in writing, with a copy to the Director, Southwest, PHMSA (Director). If Respondent requests a hearing, it will be held telephonically or in-person in Southern Region office or Washington, D.C.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. In that event, PHMSA will notify Respondent of any additional measures that are required and an amended Order issued, if necessary. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Actions:

Definitions:

Affected Segment means the segment of Respondent's Line #1 running from Collins, Mississippi, to Colonial's Pelham Station in Pelham, Alabama

Isolated Segment means the segment of Respondent's Line #1 running from Colonial's Cahaba River block valve, near Station 4984+00, to Station 5545+27, 10.6 miles from Colonial's Pelham Station in Pelham, Alabama

Director means Director, Southern Region, PHMSA.

Failure Site means the section on the Isolated Segment where the leak occurred on September 9, 2016 at Station 5155+57.

Pursuant to 49 U.S.C. § 60112, I hereby order Colonial to immediately take the following corrective actions for the Affected Segment and Isolated Segment

1. ***Restart Plan.*** Prior to resuming operation of the *Isolated Segment*, Colonial must develop and submit a written *Restart Plan* to the Director for prior approval. This applies to the restart of Line #1 upon its permanent repair, and removal of the temporary bypass.

   a. The Director may approve the *Restart Plan* incrementally without approving the entire plan, but the *Isolated Segment* cannot resume operation until the *Restart Plan* is approved in its entirety

   b. Once approved by the Director, the *Restart Plan* will be incorporated by reference into this Order.

   c. The *Restart Plan* must include procedures for removal of the temporary bypass and provide evidence that all mandated actions required for such removal have been completed.

   d. The *Restart Plan* must include procedures to safely return the *Isolated Segment* to service and provide evidence that all mandated actions required prior to restart are adequately completed

   e. The *Restart Plan* must specify a daylight restart and must include advance communications with local emergency response officials.

   f. The *Restart Plan* must provide for a review of the *Isolated Segment* for conditions similar to those in which the Failure occurred. This review should include a review of Colonial's construction, operating and maintenance (O&M) and integrity management records such as in-line inspection (ILI) results, hydrostatic tests, root cause failure analyses of prior failures, aerial and ground patrols, corrosion, cathodic protection, excavations and pipe replacements. Colonial must address any findings that require remedial measures to be implemented prior to restart.

g. The *Restart Plan* must include documentation of the completion of all mandated actions and a management of change plan to ensure that all procedural modifications are incorporated into Colonial's operations and maintenance manual

h. The *Restart Plan* must provide for hydrostatic pressure testing of the replacement pipe

i. Within 90 days of restarting the *Isolated Segment*, perform an ILI to ensure that there has been no metal loss, deformation, or other damage to the *Affected Pipeline*

2. ***Pressure Restriction.*** After the removal of the temporary bypass and receiving approval from the Director to restart Line #1, Colonial must maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the *Affected Segment* in within the 90-days prior to discovery. At no point within the Affected Segment shall the pressure exceed eighty percent (80%) of the highest steady state pressure recorded during the 90 days prior to discovery of the Failure.

3. ***Removal of Pressure Restriction.***

a. Upon written request from Colonial, the Director may allow the removal or modification of the pressure restriction when a reliable engineering analysis demonstrates that the pressure increase is safe, taking into consideration all known defects, anomalies, completion of the Repair Plan, and the operating parameters of the Affected Segment.

b. The Director may allow the temporary removal or modification of the pressure restrictions upon a written request from Colonial, demonstrating that temporary mitigative and preventive measures will be implemented prior to and during the temporary removal or modification of the pressure restriction. The Director's determination will be based on the failure cause and provision of evidence that preventative and mitigative actions taken by the operator provide for the safe operation of the *Affected Segment* during the temporary removal or modification of the pressure restriction. Appeals to determinations of the Director in this regard will be decided by the Associate Administrator for Pipeline Safety.

4. ***Mechanical and Metallurgical Testing.*** Within 45 days of excavation and exposure of the Failure Site, Colonial must complete mechanical and metallurgical testing, as well as a failure analysis of the failed pipe, including an analysis of soil samples and any foreign materials. The testing and failure analysis must be completed by an independent laboratory or expert. The testing and analysis must be completed in accordance with the following instructions:

a. Document the chain-of-custody when handling and transporting the failed pipe section and other evidence from the Failure Site;

b. Within 10 days of removing the failed pipe, develop and submit the testing protocol and the proposed testing laboratory to the Director for prior approval;

c. Prior to beginning the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow for an OPS representative to witness the testing.

d. Ensure the testing laboratory distributes all reports whether draft or final in their entirety to the Director at the same time they are made available to Colonial; and

e. The Director may grant an extension of time, in accordance with **Item 13** ***Extensions of Time,*** to complete the Mechanical and Metallurgical Testing.

5. ***Remedial Work Plan.*** Within 60 days of receipt of this Order, develop and submit to the Director for prior approval a written Remedial Work Plan (RWP) that includes corrective measures. The RWP must fully address all known or suspected factors that caused or contributed to the Failure and must include, as applicable:

a. All planned pipeline repairs or changes to operations and maintenance, personnel qualification or training, or corrosion control procedures or activities required to address all threats identified by the analysis and must contain a schedule for performing these repairs or changes. Repairs of pipeline segments must comport at a minimum with the deadlines set out in 49 C.F.R. § 195.452(h)(4). All conditions defined in 49 C.F.R. § 195.452(h)(4)(i) through (iv) must be repaired. All repairs must be performed in compliance with 49 C.F.R. § 195.422.

b. The comprehensive analysis and RWP must be submitted no later than 180 days after excavation of the failed pipe to the Director, Southern Region, OPS, for review and approval.

c. Threats identified in areas where a pipeline failure could affect a high consequence area must be properly addressed by and incorporated into Colonial's Integrity Management Program (IMP). Submit all resulting changes to your IMP no later than four months after the date of this Order for the approval of the Director.

d. The comprehensive analysis and RWP, along with any resulting changes to Colonial's IMP, must be reviewed by an independent risk assessment expert prior to submission to the Director, to verify that Colonial has included all known accidents and occurrences, has properly identified potential and existing threats, and determined that the RWP is adequate to address the identified threats.

6. ***Implementation of Work Plan.*** Implement the Remedial Work Plan as it is approved by the Director, including any revisions to the plan.

7. ***Root Cause Failure Analysis.***

a. Within 90 days of excavation and exposure of the Failure Site, Colonial must complete a root cause failure analysis (RCFA) and submit a final report of this RCFA to the Director. The RCFA must be supplemented/facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing

to the failure. The final report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.

b. The Director may grant an extension of time, in accordance with Item 13 ***Extensions of Time,*** to complete the RCFA. If an extension of time is granted, Colonial must complete a preliminary RCFA of the Failure Site and submit a report of this preliminary RCFA to the Director. The preliminary RCFA must be supplemented facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing to the Failure including, but not limited to, manufacturing defects, operational or maintenance errors, and natural disasters. The preliminary report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.

8. ***Emergency Response Plan and Training Review.*** Colonial must review and assess the effectiveness of its emergency response plan with regards to the Failure. In its review, Colonial should seek input local, state and federal agencies responding to release and investigating the cause of the failure. Include in the review and assessment the on-scene response and support, coordination, and communication with emergency responders and public officials. Also, include a review and assessment of the effectiveness of its emergency training program. Colonial must amend its emergency response plan and emergency training, if necessary, to reflect the results of this review. The documentation of this *Emergency Response Plan and Training Review* must be available for inspection by OPS or provided to the Director, if requested.

9. ***CAO Documentation Report (CDR).*** Colonial must create and revise, as necessary, a CAO Documentation Report (CDR). When Colonial has concluded all the items in this Order, it will submit the final CDR in its entirety to the Director. This will allow the Director to complete a thorough review of all actions taken by Colonial with regards to this Order prior to approving the closure of this Order. The intent is for the CDR to summarize all activities and documentation associated with this Order in one document.

a. The Director may approve the CDR incrementally without approving the entire CDR.

b. Once approved by the Director, the CDR will be incorporated by reference into this Order.

c. The CDR must include but not be limited to:

i. Table of Contents;

ii. Summary of the pipeline failure of September 9, 2016, and the response activities;

iii. Summary of pipe data/properties and all prior assessments of the *Affected Segment*;

iv. Summary of all tests, inspections, assessments, evaluations, and analysis required by the Order;

v. Summary of the Mechanical and Metallurgical Testing as required by the Order;

vi. Summary of the Remedial Work Plan as required by the Order;

vii. Summary of the RCFA with all root causes as required by the Order;

viii. Lessons learned while completing this Order;

ix. A path forward describing specific actions Colonial will take on its entire pipeline system as a result of the lessons learned from work on this Order, and

x. Appendices (if required).

Other Requirements:

10. ***Reporting.*** Colonial must submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Order, and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report is due on January 15, 2017. The Director may change the interval for the submission of these reports.

11. ***Documentation of the Costs.*** It is requested but not required that Respondent maintain documentation of the costs associated with implementation of this Order. Include in each monthly report submitted, the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.

12. ***Approvals.*** With respect to each submission that under this Order requires the approval of the Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that Respondent modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, Respondent shall proceed to take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, Respondent must correct all deficiencies within the time specified by the Director, and resubmit it for approval.

13. ***Extensions of Time.*** The Director may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension.

The actions required by this Amendment to the CAO are in addition to and do not waive any requirements that apply to Respondent's pipeline system under the Original CAO, and under

49 C.F.R. Part 195, under any other order issued to Respondent under authority of 49 U.S.C. § 60101, *et seq.*, or under any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator will be final.

Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. § 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. § 552(b).

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

In your correspondence on this matter, please refer to CPF No. and for each document you submit, please provide a copy in electronic format whenever possible.

The terms and conditions of this Amended Corrective Action Order are effective upon receipt.

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

OCT 13 2016
Date Issued

U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

VIA CERTIFIED MAIL AND FAX TO: (678) 762-2466

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

SEP 16 2016

Re: CPF No. 2-2016-5005H

Dear Mr. Felt:

Enclosed is a Corrective Action Order issued in the above-referenced case, requiring Colonial Pipeline Company to take certain corrective actions with respect to the failure on its Pipeline One (Line #1), that occurred on September 9, 2016, near Pelham, Alabama.

Service is being made by certified mail and facsimile. Service of the Corrective Action Order by electronic transmission is deemed complete upon transmission and acknowledgement of receipt, or as otherwise provided under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon completion of service.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

Enclosure

cc: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, Office of Pipeline Safety, PHMSA
Mr. James Crisko, Regional Director, Southern Region, Office of Pipeline Safety, PHMSA

U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590

In the Matter of	)	
Colonial Pipeline Company,	)	**CPF No. 2-2016-5005H**
Respondent.	)	

CORRECTIVE ACTION ORDER

Purpose and Background:

This Corrective Action Order (Order) is being issued under the authority of 49 U.S.C. § 60112 to require Colonial Pipeline Company (Colonial or Respondent), to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with the recent failure on its Colonial's Pipeline One (Line #1).[1]

On September 9, 2016, a reportable accident occurred on Colonial's Line #1, a hazardous liquid pipeline in Shelby County, Alabama, approximately three miles from the town of Pelham, Alabama (Failure). The Failure resulted in the release of approximately 6,000 barrels of gasoline into a pond (Pond #2) approximately 460 feet north of Colonial's Line #1. Line #1 transports gasoline from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a section of Line #1 that runs from Collins, Mississippi, to Atlanta Junction Station, in Atlanta, Georgia. Colonial operates a parallel pipeline that runs adjacent to Line #1, Pipeline Two (Line #2), that is approximately 40 feet apart from Line #1 at the assumed site of the Failure. Line #2 transports petroleum product from Epes, Alabama, to Anderson, South Carolina.

Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the accident.

The preliminary findings of the ongoing investigation are as follows.

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[1] Colonial operates roughly 5,500 miles of hazardous liquid transmission pipeline within the United States. The pipelines travel through the states of Texas, Louisiana, Mississippi, Alabama, Georgia, North and South Carolina, Virginia, Maryland, Pennsylvania, New Jersey, and New York. Branches from the main lines also extend into Tennessee. The system delivers a daily average of approximately 100 million gallons of liquid petroleum products to businesses and communities through the Southern and Eastern United States.

Preliminary Findings:

1) Line #1 is a 36-inch diameter hazardous liquid pipeline that runs from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a segment of Line #1 that runs from Collins, Mississippi, to Respondent's Atlanta Junction Station, in Atlanta, Georgia (Affected Segment). The exact location of the Failure is unknown,[2] but the Assumed Failure Site is on a section of Line #1 that runs from Colonial's Cahaba River block valve, near Mile Post (MP) 5065+11, to Colonial's Pelham Station in Pelham, Alabama, near MP 5545+46. A pond (Pond 2) off of the right-of-way is approximately 460 feet from the Assumed Failure Site on Line #1 (Assumed Failure Site).

2) The Affected Segment was constructed in 1963 and is composed of 36-inch diameter, 0.281-inch wall thickness, American Petroleum Institute (API) 5L, X52 pipe. The pipe has asphalt enamel coating and a double-submerged arc-welded (DSAW) seam type, and was manufactured by the National Tube Company.

3) The Maximum Operating Pressure (MOP) of Line #1 is 553 pounds per square inch gauge ("psig"), as established by hydrostatic testing in 1963. During the 30 days prior to the Failure, the operating pressure of Line #1 near the Assumed Failure Site fluctuated between 31 psig and 495 psig.[3]

4) On September 9, 2016, at 11:10 am Central Standard Time (CST), personnel of the Alabama Surface Mining Commission reported a probable leak near Line #1, in a right-of-way for this pipeline in a rural area. The personnel noted a strong gasoline odor and sheen on Pond #2, and also discovered dead vegetation near this pond.

5) Pond #2 is located near mile post 5163+89 (MP 5163+89), on Line #1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama. Pond #2 is bounded by Line #1 to the south and another pond, Pond #3, to the north.

6) On September 9, 2016, beginning at 11:30 AM CST, in response to the 11:10 am notification from the Alabama Surface Mining Commission,[4] Respondent initiated a shutdown of Lines #1 and #2. This process began when Colonial's Supervisory Control and Data Acquisition (SCADA) system controller remotely closed an automatic valve downstream of the Assumed Failure Site, at MP 5545+47 on Line #1.

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[2] *See infra* Preliminary Findings 17 – 19

[3] PHMSA officials note the variation in operating pressure readings on Line #1 in the 30 days prior to the Failure is a function of Colonial's normal pipeline operations. During normal operations, pressure readings can fluctuate depending on maintenance activities or required throughput of Line #1, and the referenced range is representative of these operational adjustments.

[4] *See supra* Preliminary Finding 4

7) On September 9, 2016, at 12:14 PM CST, Respondent's personnel at the Assumed Failure Site confirmed that gasoline had accumulated in Pond #2.

8) On September 9, 2016, at 12:59 PM CST, Respondent notified the National Response Center that gasoline had entered Pond #2 as a result of the Failure from Line #1.

9) On September 9, 2016, at approximately 3:00 PM CST, Colonial personnel manually closed a valve on Line #1 upstream of the Assumed Failure Site at MP 5065+11.

10) On September 9, 2016, at 6:57 PM CST, Colonial personnel observed a total of four deceased small wild animals near Pond #2 – a rabbit and three raccoons.

11) On September 9, 2016, at 9:00 PM CST, inspectors from the Southern Region of PHMSA, OPS, arrived at Respondent's Incident Command Center in Hoover, Alabama.

12) On September 9, 2016, at 9:00 PM CST, officials from the Pelham, Alabama Fire Department (Fire Department) determined that the air at the Assumed Failure Site and at Pond #2 contained high concentrations of benzene[5] and gasoline vapor.[6] The detected levels of benzene and gasoline vapors remained at unsafe levels at both locations through September 12, 2016.

13) On September 9, 2016, at 9:00 PM CST, due to the high concentration of benzene and gasoline vapor at both the Assumed Failure Site and Pond #2, Fire Department officials suspended all activity and evacuated all persons from these locations until September 12, 2016.

14) On September 9, 2016, at 9:13 PM CST, after consulting with PHMSA, Respondent restarted Line #2 upon confirming that the observed product in Pond #2 was gasoline from Line #1, and that no release had occurred on Line #2.

15) At approximately 8:00 AM CST on September 13, 2016, Fire Department and Colonial officials determined that after approximately 83 hours of unsafe concentrations of benzene and gasoline vapors in the air at the Assumed Failure Site, these concentrations had dropped to safe levels. Shortly after this determination, Colonial and PHMSA personnel were permitted access to the Assumed Failure Site. However, at this time, Fire Department and Colonial Officials determined these unsafe levels of benzene and gasoline vapor were still present in the air at Pond #2.

[5] Benzene is a chemical that is a natural part of the gasoline transported in Line #1 and is highly flammable. Further, inhalation of high concentrations of benzene can result in sickness or death. *See* Centers for Disease Control, https://emergency.cdc.gov/agent/benzene/basics/facts.asp (last visited September 14, 2016).

[6] U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, 2016 Emergency Response Guidebook, Guide 115 – Gases (Flammable – Included Refrigerated Liquids), Pages 170 – 171.

16) At approximately 8:00 PM CST on September 13, 2016, Fire Department and Colonial Officials determined that benzene and gasoline vapors had again risen to unsafe levels in the air at the Assumed Failure Site. Colonial Officials believed that the rise in benzene and gasoline vapor levels in the air at the Assumed Failure Site was caused by wind transport of benzene and gasoline vapors coming off of the accumulated gasoline in Pond #2.

17) Based on the unstable and fluctuating benzene and vapor levels at the Assumed Failure Site, at approximately 8:00 PM CST on September 13, 2016, Colonial personnel determined that it was necessary to indefinitely postpone their planned excavation activities at the Assumed Failure Site.

18) Colonial personnel will commence excavation activities at the Assumed Failure Site upon confirmation that benzene and gasoline vapor concentrations in the air at the Assumed Failure Site remain steady at safe levels.

19) Colonial's excavation activities at the Assumed Failure Site must commence in order for PHMSA personnel to gain the opportunity to examine the section of Line #1 which failed and determine a probable cause for the Failure. As Colonial has indefinitely suspended these activities, the probable cause of the Failure is currently unknown.

20) At approximately 8:00 PM CST on September 13, 2016, Colonial Officials updated the estimated volume release amount to 6,000 barrels of gasoline from Line #1 as a result of the Failure. This estimate is based on assumed evaporation rates, and estimates of volume accumulated in Pond #2.

21) At approximately 8:00 AM CST on September 15, 2016, Colonial officials announced that sampling indicated the presence of gasoline in Pond #3. There is presently no estimate of the volume of gasoline in Pond #3, or confirmation of how the gasoline reached the pond.

22) As of 8:00 AM CST on September 15, 2016, Colonial personnel report that approximately 54,653 gallons of gasoline have been recovered from Pond #2, and approximately 36,980 gallons of gasoline were drained from an isolated section of Line #1 bounding the Assumed Leak Site.

23) At approximately 12:30 PM CST on September 16, 2016, Colonial officials announced that its personnel had discovered a culvert below the water line in Pond #2. Colonial officials further noted this culvert connects to Pond #3, and that they believe gasoline has flowed from Pond #2, through this culvert, into Pond #3. These officials have not made an estimate as to how much gasoline is in Pond #3.

24) Through continual monitoring, Colonial personnel at the Incident Command Center have determined that a nearby populated area, Alabaster, Alabama, approximately 3 miles from the suspected Leak Site, has not been and is not currently under any

threat from the benzene and gasoline vapors. Colonial personnel continue to monitor air quality in this area for any changes.

25) In response to this incident, PHMSA is coordinating with personnel from the United States Environmental Protection Agency (EPA), as well as Local and State emergency management agencies. EPA personnel and officials from the have also reported to Colonial's incident command site. The National Transportation Safety Board (NTSB) and the Defense Logistics Agency (DLA) are aware of, and monitoring, the status of the Failure.

26) The Assumed Failure Site is within an unusually sensitive ecological area (USEA), as identified by the most current National Pipeline Mapping System (NPMS) data.[7] Aside from the above-referenced impacts to wildlife, there were no fatalities or ignition of the released gasoline.

Determination of Necessity for Corrective Action Order and Right to Hearing:

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action, as appropriate. The basis for making the determination that a pipeline facility is or would be hazardous, requiring corrective action, is set forth both in the above-referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112 and the regulations promulgated thereunder provide for the issuance of a Corrective Action Order, without prior notice and opportunity for hearing, upon a finding that failure to issue the Order expeditiously would result in the likelihood of serious harm to life, property, or the environment. In such cases, an opportunity for a hearing and expedited review will be provided as soon as practicable after the issuance of this Order.

After evaluating the foregoing preliminary findings of fact, I find that continued operation of the pipeline without corrective measures is or would be hazardous to life, property, or the environment. Additionally, I have considered the unknown probable cause of the Failure and the ongoing investigation; the unknown location of the Failure; the age of the pipeline and the history of known problems or failures on pipelines being owned and operated by Respondent; the high concentrations of benzene and gasoline vapor near the Assumed Failure Site; the proximity of the pipeline to populated areas or other unusually sensitive ecological areas, the deceased wildlife and vegetation near the Assumed Failure Site; and the soil and water contamination in the vicinity of the Assumed Failure Site. I therefore find that a failure to issue this Order expeditiously to require immediate corrective action would result in the likelihood of serious harm to life, property, or the environment.

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[7] National Pipeline Mapping System. *Ecological Unusually Sensitive Areas (USEA)*. Website: https://www.npms.phmsa.dot.gov/USAEcoData.aspx (last visited September 15, 2016) (Showing the NPMS standards for an unusually sensitive ecological areas)

Accordingly, this Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, Respondent may contest its issuance obtain expedited review either by answering in writing or requesting a hearing under 49 C.F.R. § 190.211, to be held as soon as practicable under the terms of such regulation, by notifying the Associate Administrator for Pipeline Safety in writing, with a copy to the Director, Southern, PHMSA (Director). If Respondent requests a hearing, it will be held telephonically or in-person in Southern Region office or Washington, D.C.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. In that event, PHMSA will notify Respondent of any additional measures that are required and an amended Order issued, if necessary. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Actions:

Definitions:

Affected Segment means the segment of Respondent's Line #1 running from Colonial's Collins Station in Collins, Mississippi, to its Atlanta Junction Station in Atlanta, Georgia.

Isolated Segment means the segment of Respondent's Line #1 running from Colonial's Cahaba River block valve, near MP 5065+11, to MP 5545+46, near Colonial's Pelham Station in Pelham, Alabama.

Director means Director, Southern Region, PHMSA.

Assumed Failure Site means the section on the Isolated Segment where the leak occurred on September 9, 2016, approximately 460 feet from Pond #2.

Pursuant to 49 U.S.C. § 60112, I hereby order Colonial to immediately take the following corrective actions for the Affected Segment and Isolated Segment.

1. ***Shutdown of Pipeline.*** Colonial must not operate the *Isolated Segment* until authorized to do so by the Director.

2. ***Restart Plan.*** Prior to resuming operation of the *Isolated Segment*, Colonial must develop and submit a written *Restart Plan* to the Director for prior approval.

    a. The Director may approve the *Restart Plan* incrementally without approving the entire plan, but the *Isolated Segment* cannot resume operation until the *Restart Plan* is approved in its entirety.

    b. Once approved by the Director, the *Restart Plan* will be incorporated by reference into this Order.

c. The *Restart Plan* must include procedures to safely return the *Isolated Segment* to service and provide evidence that all mandated actions required prior to restart are adequately completed

d. The *Restart Plan* must specify a daylight restart and must include advance communications with local emergency response officials.

e. The *Restart Plan* must provide for a review of the *Isolated Segment* for conditions similar to those in which the failure occurred. This review should include a review of Colonial's construction, operating and maintenance (O&M) and integrity management records such as in-line inspection (ILI) results, hydrostatic tests, root cause failure analysis of prior failures, aerial and ground patrols, corrosion, cathodic protection, excavations and pipe replacements. Colonial must address any findings that require remedial measures to be implemented prior to restart.

f. The *Restart Plan* must include documentation of the completion of all mandated actions and a management of change plan to ensure that all procedural modifications are incorporated into Colonial's operations and maintenance manual.

g. The *Restart Plan* must provide for hydrostatic pressure testing of the *Isolated Segment*

h. Prior to restart, Colonial must submit to the Director a contingency plan to operate and monitor the *Isolated Segment* during flooding conditions, including enhanced patrolling and surveillance.

i. Within 90 days of restarting the *Isolated Segment*, perform an ILI to ensure that there has been no metal loss, deformation, or other damage to the *Affected Pipeline*.

3. ***Mechanical and Metallurgical Testing***. Within 45 days of excavation and exposure of the Assumed Failure Site, Colonial must complete mechanical and metallurgical testing, as well as a failure analysis of the failed pipe, including an analysis of soil samples and any foreign materials. The testing and failure analysis must be completed by an independent laboratory or expert. The testing and analysis must be completed in accordance with the following instructions:

a. Document the chain-of-custody when handling and transporting the failed pipe section and other evidence from the Failure Site;

b. Within 10 days of removing the failed pipe, develop and submit the testing protocol and the proposed testing laboratory to the Director for prior approval;

c. Prior to beginning the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow for an OPS representative to witness the testing;

d. Ensure the testing laboratory distributes all reports whether draft or final in their entirety to the Director at the same time they are made available to Colonial; and

c. The Director may grant an extension of time, in accordance with **Item 11** ***Extensions of Time***, to complete the Mechanical and Metallurgical Testing.

4. ***Root Cause Failure Analysis.***

a. Within 90 days of excavation and exposure of the Assumed Failure Site, Colonial must complete a root cause failure analysis (RCFA) and submit a final report of this RCFA to the Director. The RCFA must be supplemented/facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing to the failure. The final report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.

b. The Director may grant an extension of time, in accordance with **Item 11** ***Extensions of Time***, to complete the RCFA. If an extension of time is granted, Colonial must complete a preliminary RCFA of the Assumed Failure Site and submit a report of this preliminary RCFA to the Director. The preliminary RCFA must be supplemented/facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing to the Failure. The preliminary report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.

5. ***Emergency Response Plan and Training Review.*** Colonial must review and assess the effectiveness of its emergency response plan with regards to the Failure. Include in the review and assessment the on-scene response and support, coordination, and communication with emergency responders and public officials. Also, include a review and assessment of the effectiveness of its emergency training program. Colonial must amend its emergency response plan and emergency training, if necessary, to reflect the results of this review. The documentation of this *Emergency Response Plan and Training Review* must be available for inspection by OPS or provided to the Director, if requested.

6. ***CAO Documentation Report (CDR).*** Colonial must create and revise, as necessary, a CAO Documentation Report (CDR). When Colonial has concluded all the items in this Order, it will submit the final CDR in its entirety to the Director. This will allow the Director to complete a thorough review of all actions taken by Colonial with regards to this Order prior to approving the closure of this Order. The intent is for the CDR to summarize all activities and documentation associated with this Order in one document.

a. The Director may approve the CDR incrementally without approving the entire CDR

b. Once approved by the Director, the CDR will be incorporated by reference into this Order.

c. The CDR must include but not be limited to:

i. Table of Contents;

ii. Summary of the pipeline failure of September 9, 2016, and the response activities;

iii. Summary of pipe data/properties and all prior assessments of the *Affected Segment*;

iv. Summary of all tests, inspections, assessments, evaluations, and analysis required by the Order;

v. Summary of the Mechanical and Metallurgical Testing as required by the Order;

vi. Summary of the RCFA with all root causes as required by the Order;

vii. Lessons learned while completing this Order;

viii. A path forward describing specific actions Colonial will take on its entire pipeline system as a result of the lessons learned from work on this Order; and

ix. Appendices (if required).

Other Requirements:

7. ***Reporting.*** Colonial must submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Order; and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report is due on January 1, 2017. The Director may change the interval for the submission of these reports.

8. ***Documentation of the Costs.*** It is requested but not required that Respondent maintain documentation of the costs associated with implementation of this Order. Include in each monthly report submitted, the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.

9. ***Approvals.*** With respect to each submission that under this Order requires the approval of the Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that Respondent modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, Respondent shall proceed to take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, Respondent must correct all deficiencies within the time specified by the Director, and resubmit it for approval.

10. ***Extensions of Time.*** The Director may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension

The actions required by this Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Part 195, under any other order issued to Respondent under authority of 49 U.S.C. § 60101, *et seq.*, or under any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator will be final.

Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. § 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. § 552(b).

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

In your correspondence on this matter, please refer to CPF No. 2-2016-5005H and for each document you submit, please provide a copy in electronic format whenever possible.

The terms and conditions of this Amended Corrective Action Order are effective upon receipt

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

SEP 16 2016
Date Issued

Congress of the United States
House of Representatives
Washington, D.C. 20515

November 2, 2016

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Foxx:

As Ranking Members of the House Committees and Subcommittees with jurisdiction over our nation's hazardous liquid pipeline system, we write to respectfully request that you immediately undertake a comprehensive examination of the Colonial Pipeline Company (Colonial), its liquid pipeline system, and the company's management as it relates to the maintenance and integrity operations of the system.

As you know, Monday evening, a fire and explosion were reported on Colonial's Line 1 in Shelby County, Alabama, which had been the source of a major spill and refined product supply disruption less than two months ago. According to accounts from your Department's Pipeline and Hazardous Materials Safety Administration (PHMSA) and media reports, one person was killed in Monday's incident and at least five others were transported to area hospitals.

Monday's explosion marks the third major incident on Colonial's system in just over a year and at least the seventh in less than five years. These incidents occurred in a variety of locations throughout Colonial's system including South Carolina, North Carolina, Virginia and Alabama. While the most recent incident was the first to result in a human fatality, these other incidents caused significant, direct harm to local communities and the environment, while the failure of Line 1 in September also had clear national implications in the form of considerably increased prices for refined petroleum products throughout many U.S. markets.

This is an unacceptable situation, and we are concerned that the number, frequency and severity of significant incidents on Colonial's system over the past five years could be symptomatic of severe underlying problems with the system and the company's management of that system.

Therefore, we urge you to immediately undertake a full and thorough investigation of the safety of the Colonial system, including Colonial's management, as well as the robustness of its maintenance and integrity oversight activities for the pipelines in the system over the past five years. We also request that you provide an initial briefing on the safety of the Colonial system and any root causes related to these failures to our Committees as soon as you are reasonably able, but in any event, by no later than December 1, 2016. If you have any questions regarding this letter, please contact Rick Kessler with the House Committee on Energy and Commerce at

PHMSA161103001

(202) 225-3641 or Jennifer Homendy with the Committee on Transportation and Infrastructure at (202) 225-3274.

Thank you in advance for your assistance with this request and for your efforts to ensure the safety of the Colonial system and its workers, the protection of our environment, and the security of our liquid fuel markets.

Sincerely,

Frank Pallone, Jr.
Ranking Member
Committee on Energy and Commerce

Peter DeFazio
Ranking Member
Committee on Transportation and Infrastructure

Bobby L. Rush
Ranking Member
Subcommittee on Energy and Power

Michael Capuano
Ranking Member
Subcommittee on Railroads, Pipelines, and Hazardous Materials

Diana DeGette
Ranking Member
Subcommittee on Oversight and Investigations

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/28/2016
	No.	20160391 - 22655 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	
Last Revision Date:	09/21/2017		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	10/31/2016 14:51		
5. Location of Accident:			
Latitude:	33.204379		
Longitude:	-87.006137		
6. National Response Center Report Number (if applicable):	1162982		
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	10/31/2016 15:56		
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Gasoline (non-Ethanol)		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	4,444.50		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):			
12. Were there fatalities?	Yes		
- If Yes, specify the number in each category:			
12a. Operator employees	0		
12b. Contractor employees working for the Operator	2		
12c. Non-Operator emergency responders	0		
12d. Workers working on the right-of-way, but NOT associated with this Operator	0		
12e. General public	0		
12f. Total fatalities (sum of above)	2		
13. Were there injuries requiring inpatient hospitalization?	Yes		
- If Yes, specify the number in each category:			
13a. Operator employees	0		
13b. Contractor employees working for the Operator	4		
13c. Non-Operator emergency responders	0		
13d. Workers working on the right-of-way, but NOT associated with this Operator	0		
13e. General public	0		

13f. Total injuries (sum of above)	4
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	10/31/2016 15:00
14b. Local time pipeline/facility restarted:	11/06/2016 05:45
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	Yes
16. Did the commodity explode?	No
17. Number of general public evacuated:	0
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	10/31/2016 14:51
18b. Local time Operator resources arrived on site:	10/31/2016 14:51

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Alabama
3. Zip Code:	35080
4. City	Helena
5. County or Parish	Shelby
6. Operator-designated location:	Survey Station No.
Specify:	485073
7. Pipeline/Facility name:	Line 01
8. Segment name/ID:	Collins to Pelham
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Exposed due to excavation
- If Other, Describe:	
Depth-of-Cover (in):	31
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pipeline, Including Valve Sites
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe
- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	36

3b. Wall thickness (in):	.281
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	52,000
3d. Pipe specification:	API 5L
3e. Pipe Seam , specify:	DSAW
- If Other, Describe:	
3f. Pipe manufacturer:	National Tube
3g. Year of manufacture:	1960
3h. Pipeline coating type at point of Accident, specify:	Asphalt
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1961
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Other
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	Unknown.
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	Yes
- Vegetation	
- Wildlife	
5. Water contamination:	No
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	
5c. Name of body of water, if commonly known:	
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 3,600,000
8b. Estimated cost of commodity lost	$ 269,292
8c. Estimated cost of Operator's property damage & repairs	$ 3,300,000
8d. Estimated cost of Operator's emergency response	$ 9,500,000
8e. Estimated cost of Operator's environmental remediation	$ 175,000
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 16,844,292

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	122.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	541.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	Remotely Controlled
5b. Type of downstream valve used to initially isolate release source:	Remotely Controlled
5c. Length of segment isolated between valves (ft):	147,078
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	Yes
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	Yes
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	CPM leak detection system or SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations)
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	Yes, but the investigation of the control room and/or controller actions has not yet been completed by the operator (Supplemental Report Required)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
1a. Specify how many were tested:	2
1b. Specify how many failed:	0
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
2a. Specify how many were tested:	4
2b. Specify how many failed:	0

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G8 - Other Incident Cause

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	Unknown
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	Still under investigation, cause of Accident to be determined* (*Supplemental Report required)

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

An incident occurred on Line 1 while contract workers were performing work on the line. The accident is under investigation by NTSB at this time. An estimated 5000 tons of soil is left to be excavated. Using an estimated 400ppm GRO, the soil volume calculation yields 657 gallons of product. Soil will disposed of at a CPC approved landfill.

Update 9/21/2017: Updated to include Estimated Property Damage under Section D.8. The NTSB Investigation continues, however, on August 22, 2017, NTSB confirmed disclosure of estimated property damage information was permissible. Estimated total soil to be excavated has been updated to be 22,000 tons. Using an estimated soil concentration of 250 mg/Kg Gasoline Range Organics, the soil volume estimate is calculated to be 1,805 gallons. Soils will be disposed of at Pineview Landfill in Dora, Alabama. Final soil volume will be communicated when excavation is completed.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Denise Langley
Preparer's Title	Compliance Coordinator SED
Preparer's Telephone Number	770-819-3574
Preparer's E-mail Address	djohnson2@colpipe.com
Preparer's Facsimile Number	
Authorized Signer Name	Jonathan B Bernhardt
Authorized Signer Title	Manager Pipeline Compliance
Authorized Signer Telephone Number	678-762-2203
Authorized Signer Email	jbernhardt@colpipe.com
Date	09/21/2017

From: Klinger, Patricia (PHMSA)
Sent: Thursday, October 13, 2016 1:29 PM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'
Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: Colonial Pipeline leak in Pelham, AL--PHMSA Issues Amendment to the Corrective Action Order

Good afternoon.

Wanted to let you know that today we amended the Sept. 16 Corrective Action Order originally issued to Colonial Pipeline Company in response to the Sept. 9 pipeline rupture in Pelham, Alabama, that resulted the release of approximately 6,000 gallons of fuel into a retention pond. The amendment directs Colonial to immediately take a number of corrective actions to protect the public, property, and the environment from potential hazards associated with the failure, including developing a Restart Plan that would apply once permanent repairs have been made and a temporary bypass approved to facilitate limited operation of the line has been removed. PHMSA is investigating the cause of the failure, any factors that contributed to the severity of the incident, and the operator's adherence to Federal pipeline safety standards. As our investigation continues, the order can be amended to direct the operator to take additional actions to address the root cause of this incident, as well as any other factors that may have contributed to the pipeline failure.

We will post the amended CAO and issue a news digest later today. The amended order will be posted here.

From: Klinger, Patricia (PHMSA)
Sent: Friday, September 23, 2016 3:18 PM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'; Klinger, Patricia (PHMSA)
Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: RE: Colonial Pipeline leak in Pelham, AL--update #8

Colonial Pipeline Company is developing a pipeline excavation plan to be submitted to PHMSA's Office of Pipeline Safety. The plan will be reviewed by PHMSA's OPS before excavation continues. The excavation plan will be for the isolated/disconnected section of the pipe that contains the failure. Excavation will not occur for a few days. Approximately 2033 bbls have been recovered from Pond 2 and approximately 6578 bbls are estimated to have evaporated to date. The amount of product extracted from the pipe is approximately 1600 bbls.

Next update will be the week of September 26. Have a great weekend!

From: Klinger, Patricia (PHMSA)
Sent: Thursday, September 22, 2016 11:29 AM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'; Klinger, Patricia (PHMSA)

Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: RE: Colonial Pipeline leak in Pelham, AL--update #7

Good morning. Wanted to let you know that Colonial Pipeline Company restarted Line 1 after successfully completing the tests on the bypass. The Corrective Action Order remains in place.

From: Klinger, Patricia (PHMSA)
Sent: Tuesday, September 20, 2016 5:23 PM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'; Klinger, Patricia (PHMSA)
Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: RE: Colonial Pipeline leak in Pelham, AL--update #6

Good afternoon wanted to let you know that we authorized Colonial Pipeline Company (Colonial) to construct a bypass pipeline as a temporary measure to restore service to the areas affected by a pipeline failure that occurred on September 9, 2016 in Shelby, Alabama. The approval will allow the company to continue to service the affected areas while an excavation and pipeline inspection are completed, and does not affect the terms of the Corrective Action Order PHMSA issued on September 16, 2016. Colonial will secure the above-ground bypass with 24/7 monitoring until the bypass is removed from service.

From: Klinger, Patricia (PHMSA)
Sent: Sunday, September 18, 2016 4:49 PM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'; Klinger, Patricia (PHMSA)
Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: RE: Colonial Pipeline leak in Pelham, AL--update #5

Good afternoon. In addition to the Corrective Action Order we issued on Friday wanted to provide you with another update.

As of the 10:00 AM EDT today, the amount of product extracted from the pipe remains at 1073 bbls. Remote skimming of Pond 2 is ongoing. Approximately 2050 bbls have been recovered from Pond 2 and approximately 5453 bbls are estimated to have evaporated from this pond to date.

Colonial has halted the excavation of the assumed failure site as a result of high benzene levels. All efforts are now directed towards the installation of a 36-inch aboveground bypass.

PHMSA personnel are reviewing the work plan and bypass design. Our investigation into the cause of the failure is ongoing and we will provide you with another update tomorrow.

From: Klinger, Patricia (PHMSA)
Sent: Thursday, September 15, 2016 4:59 PM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'; Klinger, Patricia (PHMSA)
Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: RE: Colonial Pipeline leak in Pelham, AL--update #4

Good afternoon. The spill volume has changed; Colonial Pipeline provided update and submitted another report to the National Response Center. Their new estimate is 6000 barrels. The estimate is based on the following assumptions: 50% of the release volume evaporated; 40% accumulated in nearby pond; and 10% has been

recovered by skimming the affected pond (being referred to as "Pond 2"). Colonial estimates the initial volume of product in Pond 2 to have been approximately 2400 bbls.

As of this morning, 880 bbls had been extracted from the pipe. Drain up operations were slowed by high volatile organic compound (VOC) and benzene levels. Skimming on Pond 2 were intermittent due to high VOC and benzene levels also. Approximately 1300 bbls have been recovered from Pond 2 and approximately 3880 bbls are estimated to have evaporated from this pond to date.

Our folks are still on site.

From: Klinger, Patricia (PHMSA)
Sent: Tuesday, September 13, 2016 12:42 PM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'; Klinger, Patricia (PHMSA)
Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: RE: Colonial Pipeline leak in Pelham, AL--update #3

Good afternoon. Our investigators are still at the Incident Command. Vapors at the release site have diminished so excavation can begin off to the side in preparation for future work. Colonial plans to probe the area where product was found to determine the extent of the contamination and possible failure point. As of this morning (9:00 AM EDT), 74,928 gallons have been recovered with over 7,800 gallons (~186 bbls) estimated to be product. Vapors at a nearby pond that contains product continue to fluctuate to unsafe levels.

From: Klinger, Patricia (PHMSA)
Sent: Sunday, September 11, 2016 5:27 PM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'; Klinger, Patricia (PHMSA)
Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: RE: Colonial Pipeline leak in Pelham, AL--update #2

Good afternoon. Wanted to provide an update on the situation. Colonial Pipeline's Incident Command was relocated to the Pelham Civic Center Saturday evening. As of 12:30 PM CDT, PHMSA's inspectors are at the incident command, but still have not been able to access the release location due to high vapor levels.

Skimming operations continue to be delayed due to high vapor levels. The amount of water/gasoline mixture recovered stands at 362 barrels.

From: Klinger, Patricia (PHMSA)
Sent: Saturday, September 10, 2016 5:45 PM
To: 'dayne_cutrell@shelby.senate.gov'; brandon_middleton@sessions.senate.gov; 'johnny.moyer@mail.house.gov'; Klinger, Patricia (PHMSA)
Cc: Gilliard, Artealia (PHMSA); Hill, Damon (PHMSA)
Subject: Colonial Pipeline leak in Pelham, AL

Wanted to let you know that we received word yesterday about a small leak in Pelham, AL from a Colonial Pipeline. The gasoline is contained in a retention pond along the right of way in a rural area. Gasoline, initially reported as 24 barrels was based on an aerial observance. Colonial is now estimating a release of 1000 barrels of gasoline, but this could change as we learn more. The line has been shut down.

At 9:00 PM CDT September 9, 2016 the local fire department personnel determined that the vapor concentration levels at the release site were too high to allow any activity in the area. The fire department has been working with Colonial to continuously foam the retention pond. As of 8:30 AM CDT today, clean-up/recovery crews have been allowed at the release site. PHMSA investigators on scene are not able to access the release location due to the high vapor levels.

Booms are in place, skimming has not yet begun. Gasoline is contained in the retention pond it was initially discovered in. Will continue to provide updates as we receive them.

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	10/07/2016
	No.	20160324 - 32082 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**

Last Revision Date:	05/06/2019
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	09/09/2016 11:10
5. Location of Accident:	
Latitude:	33.242297
Longitude:	-86.918265
6. National Response Center Report Number (if applicable):	1158584
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	09/09/2016 12:59
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Gasoline (non-Ethanol)
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	7,370.00
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	2,141.00
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	09/09/2016 11:30
14b. Local time pipeline/facility restarted:	09/21/2016 17:31
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	0
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	09/09/2016 11:10
18b. Local time Operator resources arrived on site:	09/09/2016 12:14

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Alabama
3. Zip Code:	35080
4. City	Helena
5. County or Parish	Shelby
6. Operator-designated location:	Survey Station No.
Specify:	MP 579
7. Pipeline/Facility name:	Line 01
8. Segment name/ID:	Line 01 Collins to Pelham
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	144
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pipeline, Including Valve Sites
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe
- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	36

3b. Wall thickness (in):	.281
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	52,000
3d. Pipe specification:	API 5L
3e. Pipe Seam , specify:	DSAW
- If Other, Describe:	
3f. Pipe manufacturer:	National Tube
3g. Year of manufacture:	1960
3h. Pipeline coating type at point of Accident, specify:	Field Applied Epoxy
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1961
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Other
- If Other, Describe:	A wrinkle with a crack (See H)
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	Yes
1a. If Yes, specify all that apply:	
- Fish/aquatic	Yes
- Birds	Yes
- Terrestrial	Yes
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	Yes
- Soil	Yes
- Vegetation	Yes
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	Yes
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	7,348.60
5c. Name of body of water, if commonly known:	Retention Pond
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 329,391
8c. Estimated cost of Operator's property damage & repairs	$ 2,500,000
8d. Estimated cost of Operator's emergency response	$ 38,100,000
8e. Estimated cost of Operator's environmental remediation	$ 2,000,000
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 42,929,391

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	207.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	563.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	Remotely Controlled
5b. Type of downstream valve used to initially isolate release source:	Remotely Controlled
5c. Length of segment isolated between valves (ft):	147,109
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Notification From Public
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	Controller contribution not a contributing factor - Controller/Control Room Investigation not warranted
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G8 - Other Incident Cause

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – **Equipment Failure** - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	Miscellaneous
- If Miscellaneous:	
1. Describe:	Maintenance activities performed during a recoating project in 2015 appears to have resulted in inadequate vertical support of the pipeline that created an external loading condition conducive to buckling at the failure location.
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On 09/09/16 at 11:10 CST the Colonial Pipeline Control Center was notified of a suspected leak in Shelby County, AL (approximately 9 miles upstream of Pelham Station). The Control Center reported shutdown and remote isolation of the segment at 11:30. At 11:20 local ROW personnel were dispatched to investigate. At 12:14 field observers confirmed a release of gasoline. NRC was notified at 12:59 via report #1158584. ADEM, County EMA and Local Fire Departments were subsequently notified and a Unified Command System structure was implemented. Subsequent NRC reports were made as follows:
9/09/16 23:13 - #1158628 update to 1,000 bbls
9/13/16 18:58 - #1158929 update to 6,000 bbls

On 01/27/17 DNV GL submitted the Root Cause Failure Analysis Report to Colonial. The report stated that "a wrinkle occurred in the pipe extending approximately 180 degrees from the 9 o'clock to 3 o'clock position. A circumferential crack of approximately 1-1.5 inches was present at approximately the 12 o'clock position at the wrinkle path. The wrinkle was caused by "inadequate soil consolidation under Line 01 following maintenance/recoat activities in 2015."

Update 2/14/18: Soil mass balance for the CR91 Release was calculated using landfill weight tickets and an average of the TPH GRO from stockpile samples. The TPH GRO average was 278.5 mg/Kg and the soil weight was 13942 tons. Using the worksheet, total volume of product in soil was calculated to be 1,275 gallons. All soil was disposed of at a landfill with disposal approval by ADEM. Any future, long-term remediation will be conducted under the guidnace of ADEM.

PART I - PREPARER AND AUTHORIZED SIGNATURE

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U.S. Department
of Transportation

**Pipeline and Hazardous
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VIA CERTIFIED MAIL AND FAX TO: (678) 762-2466

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

SEP 16 2016

Re: CPF No. 2-2016-50051I

Dear Mr. Felt:

Enclosed is a Corrective Action Order issued in the above-referenced case, requiring Colonial Pipeline Company to take certain corrective actions with respect to the failure on its Pipeline One (Line #1), that occurred on September 9, 2016, near Pelham, Alabama.

Service is being made by certified mail and facsimile. Service of the Corrective Action Order by electronic transmission is deemed complete upon transmission and acknowledgement of receipt, or as otherwise provided under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon completion of service.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

Enclosure

cc: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, Office of Pipeline Safety, PHMSA
Mr. James Urisko, Regional Director, Southern Region, Office of Pipeline Safety, PHMSA

U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590

In the Matter of	)	
Colonial Pipeline Company,	)	**CPF No. 2-2016-5005H**
Respondent.	)	

CORRECTIVE ACTION ORDER

Purpose and Background

This Corrective Action Order (Order) is being issued under the authority of 49 U.S.C. § 60112 to require Colonial Pipeline Company (Colonial or Respondent), to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with the recent failure on its Colonial's Pipeline One (Line #1).[1]

On September 9, 2016, a reportable accident occurred on Colonial's Line #1, a hazardous liquid pipeline in Shelby County, Alabama, approximately three miles from the town of Pelham, Alabama (Failure). The Failure resulted in the release of approximately 6,000 barrels of gasoline into a pond (Pond #2) approximately 460 feet north of Colonial's Line #1. Line #1 transports gasoline from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a section of Line #1 that runs from Collins, Mississippi, to Atlanta Junction Station, in Atlanta, Georgia. Colonial operates a parallel pipeline that runs adjacent to Line #1, Pipeline Two (Line #2), that is approximately 40 feet apart from Line #1 at the assumed site of the Failure. Line #2 transports petroleum product from Epes, Alabama, to Anderson, South Carolina.

Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the accident.

The preliminary findings of the ongoing investigation are as follows.

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[1] Colonial operates roughly 5,500 miles of hazardous liquid transmission pipeline within the United States. The pipelines travel through the states of Texas, Louisiana, Mississippi, Alabama, Georgia, North and South Carolina, Virginia, Maryland, Pennsylvania, New Jersey, and New York. Branches from the main lines also extend into Tennessee. The system delivers a daily average of approximately 100 million gallons of liquid petroleum products to businesses and communities through the Southern and Eastern United States.

Preliminary Findings:

1) Line #1 is a 36-inch diameter hazardous liquid pipeline that runs from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a segment of Line #1 that runs from Collins, Mississippi, to Respondent's Atlanta Junction Station, in Atlanta, Georgia (Affected Segment). The exact location of the Failure is unknown,[2] but the Assumed Failure Site is on a section of Line #1 that runs from Colonial's Cahaba River block valve, near Mile Post (MP) 5065+11, to Colonial's Pelham Station in Pelham, Alabama, near MP 5545+46. A pond (Pond 2) off of the right-of-way is approximately 460 feet from the Assumed Failure Site on Line #1 (Assumed Failure Site).

2) The Affected Segment was constructed in 1963 and is composed of 36-inch diameter, 0.281-inch wall thickness, American Petroleum Institute (API) 5L, X52 pipe. The pipe has asphalt enamel coating and a double-submerged arc-welded (DSAW) seam type, and was manufactured by the National Tube Company.

3) The Maximum Operating Pressure (MOP) of Line #1 is 553 pounds per square inch gauge ("psig"), as established by hydrostatic testing in 1963. During the 30 days prior to the Failure, the operating pressure of Line #1 near the Assumed Failure Site fluctuated between 31 psig and 495 psig.[3]

4) On September 9, 2016, at 11:10 am Central Standard Time (CST), personnel of the Alabama Surface Mining Commission reported a probable leak near Line #1, in a right-of-way for this pipeline in a rural area. The personnel noted a strong gasoline odor and sheen on Pond #2, and also discovered dead vegetation near this pond.

5) Pond #2 is located near mile post 5163+89 (MP 5163+89), on Line #1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama. Pond #2 is bounded by Line #1 to the south and another pond, Pond #3, to the north.

6) On September 9, 2016, beginning at 11:30 AM CST, in response to the 11:10 am notification from the Alabama Surface Mining Commission,[4] Respondent initiated a shutdown of Lines #1 and #2. This process began when Colonial's Supervisory Control and Data Acquisition (SCADA) system controller remotely closed an automatic valve downstream of the Assumed Failure Site, at MP 5545+47 on Line #1.

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[2] *See infra* Preliminary Findings 17 – 19.

[3] PHMSA officials note the variation in operating pressure readings on Line #1 in the 30 days prior to the Failure is a function of Colonial's normal pipeline operations. During normal operations, pressure readings can fluctuate depending on maintenance activities or required throughput of Line #1, and the referenced range is representative of these operational adjustments.

[4] *See supra* Preliminary Finding 4.

7) On September 9, 2016, at 12:14 PM CST, Respondent's personnel at the Assumed Failure Site confirmed that gasoline had accumulated in Pond #2.

8) On September 9, 2016, at 12:59 PM CST, Respondent notified the National Response Center that gasoline had entered Pond #2 as a result of the Failure from Line #1.

9) On September 9, 2016, at approximately 3:00 PM CST, Colonial personnel manually closed a valve on Line #1 upstream of the Assumed Failure Site at MP 5065+11.

10) On September 9, 2016, at 6:57 PM CST, Colonial personnel observed a total of four deceased small wild animals near Pond #2 – a rabbit and three raccoons.

11) On September 9, 2016, at 9:00 PM CST, inspectors from the Southern Region of PHMSA, OPS, arrived at Respondent's Incident Command Center in Hoover, Alabama.

12) On September 9, 2016, at 9:00 PM CST, officials from the Pelham, Alabama Fire Department (Fire Department) determined that the air at the Assumed Failure Site and at Pond #2 contained high concentrations of benzene[3] and gasoline vapor.[4] The detected levels of benzene and gasoline vapors remained at unsafe levels at both locations through September 12, 2016.

13) On September 9, 2016, at 9:00 PM CST, due to the high concentration of benzene and gasoline vapor at both the Assumed Failure Site and Pond #2, Fire Department officials suspended all activity and evacuated all persons from these locations until September 12, 2016.

14) On September 9, 2016, at 9:13 PM CST, after consulting with PHMSA, Respondent restarted Line #2 upon confirming that the observed product in Pond #2 was gasoline from Line #1, and that no release had occurred on Line #2.

15) At approximately 8:00 AM CST on September 13, 2016, Fire Department and Colonial officials determined that after approximately 83 hours of unsafe concentrations of benzene and gasoline vapors in the air at the Assumed Failure Site, these concentrations had dropped to safe levels. Shortly after this determination, Colonial and PHMSA personnel were permitted access to the Assumed Failure Site. However, at this time, Fire Department and Colonial Officials determined these unsafe levels of benzene and gasoline vapor were still present in the air at Pond #2.

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[3] Benzene is a chemical that is a natural part of the gasoline transported in Line #1 and is highly flammable. Further, inhalation of high concentrations of benzene can result in sickness or death. See Centers for Disease Control. https://emergency.cdc.gov/agent/benzene/basics/facts.asp (last visited September 14, 2016).

[4] U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration. 2016 Emergency Response Guidebook. Guide 115 – Gases (Flammable – Included Refrigerated Liquids). Pages 170 – 171.

16) At approximately 8:00 PM CST on September 13, 2016, Fire Department and Colonial Officials determined that benzene and gasoline vapors had again risen to unsafe levels in the air at the Assumed Failure Site. Colonial Officials believed that the rise in benzene and gasoline vapor levels in the air at the Assumed Failure Site was caused by wind transport of benzene and gasoline vapors coming off of the accumulated gasoline in Pond #2.

17) Based on the unstable and fluctuating benzene and vapor levels at the Assumed Failure Site, at approximately 8:00 PM CST on September 13, 2016, Colonial personnel determined that it was necessary to indefinitely postpone their planned excavation activities at the Assumed Failure Site.

18) Colonial personnel will commence excavation activities at the Assumed Failure Site upon confirmation that benzene and gasoline vapor concentrations in the air at the Assumed Failure Site remain steady at safe levels.

19) Colonial's excavation activities at the Assumed Failure Site must commence in order for PHMSA personnel to gain the opportunity to examine the section of Line #1 which failed and determine a probable cause for the Failure. As Colonial has indefinitely suspended these activities, the probable cause of the Failure is currently unknown.

20) At approximately 8:00 PM CST on September 13, 2016, Colonial Officials updated the estimated volume release amount to 6,000 barrels of gasoline from Line #1 as a result of the Failure. This estimate is based on assumed evaporation rates, and estimates of volume accumulated in Pond #2.

21) At approximately 8:00 AM CST on September 15, 2016, Colonial officials announced that sampling indicated the presence of gasoline in Pond #3. There is presently no estimate of the volume of gasoline in Pond #3, or confirmation of how the gasoline reached the pond.

22) As of 8:00 AM CST on September 15, 2016, Colonial personnel report that approximately 54,653 gallons of gasoline have been recovered from Pond #2, and approximately 36,980 gallons of gasoline were drained from an isolated section of Line #1 bounding the Assumed Leak Site.

23) At approximately 12:30 PM CST on September 16, 2016, Colonial officials announced that its personnel had discovered a culvert below the water line in Pond #2. Colonial officials further noted this culvert connects to Pond #3, and that they believe gasoline has flowed from Pond #2, through this culvert, into Pond #3. These officials have not made an estimate as to how much gasoline is in Pond #3.

24) Through continual monitoring, Colonial personnel at the Incident Command Center have determined that a nearby populated area, Alabaster, Alabama, approximately 3 miles from the suspected Leak Site, has not been and is not currently under any

threat from the benzene and gasoline vapors. Colonial personnel continue to monitor air quality in this area for any changes.

25) In response to this incident, PHMSA is coordinating with personnel from the United States Environmental Protection Agency (EPA), as well as Local and State emergency management agencies. EPA personnel and officials from the have also reported to Colonial's incident command site. The National Transportation Safety Board (NTSB) and the Defense Logistics Agency (DLA) are aware of, and monitoring, the status of the Failure.

26) The Assumed Failure Site is within an unusually sensitive ecological area (USEA), as identified by the most current National Pipeline Mapping System (NPMS) data.[3] Aside from the above-referenced impacts to wildlife, there were no fatalities or ignition of the released gasoline.

Determination of Necessity for Corrective Action Order and Right to Hearing:

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action, as appropriate. The basis for making the determination that a pipeline facility is or would be hazardous, requiring corrective action, is set forth both in the above-referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112 and the regulations promulgated thereunder provide for the issuance of a Corrective Action Order, without prior notice and opportunity for hearing, upon a finding that failure to issue the Order expeditiously would result in the likelihood of serious harm to life, property, or the environment. In such cases, an opportunity for a hearing and expedited review will be provided as soon as practicable after the issuance of this Order.

After evaluating the foregoing preliminary findings of fact, I find that continued operation of the pipeline without corrective measures is or would be hazardous to life, property, or the environment. Additionally, I have considered the unknown probable cause of the Failure and the ongoing investigation; the unknown location of the Failure; the age of the pipeline and the history of known problems or failures on pipelines being owned and operated by Respondent; the high concentrations of benzene and gasoline vapor near the Assumed Failure Site; the proximity of the pipeline to populated areas or other unusually sensitive ecological areas; the deceased wildlife and vegetation near the Assumed Failure Site; and the soil and water contamination in the vicinity of the Assumed Failure Site. I therefore find that a failure to issue this Order expeditiously to require immediate corrective action would result in the likelihood of serious harm to life, property, or the environment.

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[3] National Pipeline Mapping System, *Ecological Unusually Sensitive Areas (USEA)*, Website: https://www.npms.phmsa.dot.gov/USAEcoData.aspx (last visited September 15, 2016) (Showing the NPMS standards for an unusually sensitive ecological area).

Accordingly, this Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, Respondent may contest its issuance obtain expedited review either by answering in writing or requesting a hearing under 49 C.F.R. § 190.211, to be held as soon as practicable under the terms of such regulation, by notifying the Associate Administrator for Pipeline Safety in writing, with a copy to the Director, Southern, PHMSA (Director). If Respondent requests a hearing, it will be held telephonically or in-person in Southern Region office or Washington, D.C.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. In that event, PHMSA will notify Respondent of any additional measures that are required and an amended Order issued, if necessary. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Actions:

Definitions:

Affected Segment means the segment of Respondent's Line #1 running from Colonial's Collins Station in Collins, Mississippi, to its Atlanta Junction Station in Atlanta, Georgia.

Isolated Segment means the segment of Respondent's Line #1 running from Colonial's Cahaba River block valve, near MP 5065+11, to MP 5545+46, near Colonial's Pelham Station in Pelham, Alabama.

Director means Director, Southern Region, PHMSA.

Assumed Failure Site means the section on the Isolated Segment where the leak occurred on September 9, 2016, approximately 460 feet from Pond #2.

Pursuant to 49 U.S.C. § 60112, I hereby order Colonial to immediately take the following corrective actions for the Affected Segment and Isolated Segment.

1. ***Shutdown of Pipeline.*** Colonial must not operate the *Isolated Segment* until authorized to do so by the Director.

2. ***Restart Plan.*** Prior to resuming operation of the *Isolated Segment*, Colonial must develop and submit a written *Restart Plan* to the Director for prior approval.

    a. The Director may approve the *Restart Plan* incrementally without approving the entire plan, but the *Isolated Segment* cannot resume operation until the *Restart Plan* is approved in its entirety.

    b. Once approved by the Director, the *Restart Plan* will be incorporated by reference into this Order.

c. The *Restart Plan* must include procedures to safely return the *Isolated Segment* to service and provide evidence that all mandated actions required prior to restart are adequately completed.

d. The *Restart Plan* must specify a daylight restart and must include advance communications with local emergency response officials.

e. The *Restart Plan* must provide for a review of the *Isolated Segment* for conditions similar to those in which the failure occurred. This review should include a review of Colonial's construction, operating and maintenance (O&M) and integrity management records such as in-line inspection (ILI) results, hydrostatic tests, root cause failure analysis of prior failures, aerial and ground patrols, corrosion, cathodic protection, excavations and pipe replacements. Colonial must address any findings that require remedial measures to be implemented prior to restart.

f. The *Restart Plan* must include documentation of the completion of all mandated actions and a management of change plan to ensure that all procedural modifications are incorporated into Colonial's operations and maintenance manual.

g. The *Restart Plan* must provide for hydrostatic pressure testing of the *Isolated Segment*.

h. Prior to restart, Colonial must submit to the Director a contingency plan to operate and monitor the *Isolated Segment* during flooding conditions, including enhanced patrolling and surveillance.

i. Within 90 days of restarting the *Isolated Segment*, perform an ILI to ensure that there has been no metal loss, deformation, or other damage to the *Affected Pipeline*.

3. ***Mechanical and Metallurgical Testing***. Within 45 days of excavation and exposure of the Assumed Failure Site, Colonial must complete mechanical and metallurgical testing, as well as a failure analysis of the failed pipe, including an analysis of soil samples and any foreign materials. The testing and failure analysis must be completed by an independent laboratory or expert. The testing and analysis must be completed in accordance with the following instructions:

a. Document the chain-of-custody when handling and transporting the failed pipe section and other evidence from the Failure Site;

b. Within 10 days of removing the failed pipe, develop and submit the testing protocol and the proposed testing laboratory to the Director for prior approval;

c. Prior to beginning the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow for an OPS representative to witness the testing;

d. Ensure the testing laboratory distributes all reports whether draft or final in their entirety to the Director at the same time they are made available to Colonial; and

c. The Director may grant an extension of time, in accordance with **Item 11 *Extensions of Time*,** to complete the Mechanical and Metallurgical Testing.

4. ***Root Cause Failure Analysis.***

a. Within 90 days of excavation and exposure of the Assumed Failure Site, Colonial must complete a root cause failure analysis (RCFA) and submit a final report of this RCFA to the Director. The RCFA must be supplemented/facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing to the failure. The final report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.

b. The Director may grant an extension of time, in accordance with **Item 11 *Extensions of Time*,** to complete the RCFA. If an extension of time is granted, Colonial must complete a preliminary RCFA of the Assumed Failure Site and submit a report of this preliminary RCFA to the Director. The preliminary RCFA must be supplemented/facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing to the Failure. The preliminary report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.

5. ***Emergency Response Plan and Training Review.*** Colonial must review and assess the effectiveness of its emergency response plan with regards to the Failure. Include in the review and assessment the on-scene response and support, coordination, and communication with emergency responders and public officials. Also, include a review and assessment of the effectiveness of its emergency training program. Colonial must amend its emergency response plan and emergency training, if necessary, to reflect the results of this review. The documentation of this *Emergency Response Plan and Training Review* must be available for inspection by OPS or provided to the Director, if requested.

6. ***CAO Documentation Report (CDR).*** Colonial must create and revise, as necessary, a CAO Documentation Report (CDR). When Colonial has concluded all the items in this Order, it will submit the final CDR in its entirety to the Director. This will allow the Director to complete a thorough review of all actions taken by Colonial with regards to this Order prior to approving the closure of this Order. The intent is for the CDR to summarize all activities and documentation associated with this Order in one document.

a. The Director may approve the CDR incrementally without approving the entire CDR.

b. Once approved by the Director, the CDR will be incorporated by reference into this Order.

c. The CDR must include but not be limited to:

i. Table of Contents;

ii. Summary of the pipeline failure of September 9, 2016, and the response activities;

iii. Summary of pipe data/properties and all prior assessments of the *Affected Segment*;

iv. Summary of all tests, inspections, assessments, evaluations, and analysis required by the Order;

v. Summary of the Mechanical and Metallurgical Testing as required by the Order;

vi. Summary of the RCFA with all root causes as required by the Order;

vii. Lessons learned while completing this Order;

viii. A path forward describing specific actions Colonial will take on its entire pipeline system as a result of the lessons learned from work on this Order; and

ix. Appendices (if required).

Other Requirements:

7. ***Reporting.*** Colonial must submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Order; and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report is due on January 1, 2017. The Director may change the interval for the submission of these reports.

8. ***Documentation of the Costs.*** It is requested but not required that Respondent maintain documentation of the costs associated with implementation of this Order. Include in each monthly report submitted, the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.

9. ***Approvals.*** With respect to each submission that under this Order requires the approval of the Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that Respondent modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, Respondent shall proceed to take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, Respondent must correct all deficiencies within the time specified by the Director, and resubmit it for approval.

10. ***Extensions of Time.*** The Director may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension.

The actions required by this Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Part 195, under any other order issued to Respondent under authority of 49 U.S.C. § 60101, *et seq.*, or under any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator will be final.

Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. § 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. § 552(b).

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

In your correspondence on this matter, please refer to CPF No. 2-2016-5005H and for each document you submit, please provide a copy in electronic format whenever possible.

The terms and conditions of this Amended Corrective Action Order are effective upon receipt.

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

SEP 16 2016
Date Issued

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

1200 New Jersey Ave. SE
Washington, D.C. 20590

VIA CERTIFIED MAIL AND FAX TO: (678) 762-2466

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Felt:

On September 16, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued a Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line 1 (Line 1), in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure resulted in the release of approximately 8,000 barrels of gasoline into a pond approximately 460 feet north of Line 1, which transports gasoline from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Atlanta Junction Station in Atlanta, Georgia. Colonial also operates a parallel liquid line (Line 2) that is located approximately 40 feet from Line 1 at the assumed site of the Failure. Line 2 also transports petroleum product from Epes, Alabama, to Anderson, South Carolina.

As you know, Paragraph 2 of the Required Corrective Actions in the CAO requires that Colonial submit a Restart Plan to this office for approval prior to resuming operations of that portion of Line 1 near the site of the Failure (Isolated Segment). Colonial has proposed installing a 36-inch diameter temporary 500-foot bypass line on the Isolated Segment to facilitate limited pipeline operation of Line 1. This bypass will permit passage of product through Line 1 and around the Assumed Failure Site (as described in the CAO) while the excavation, pipeline inspection and search for the failed section of pipe continue.

You have estimated that the bypass tie-ins to Line 1 will be located at Station 5150+03 (upstream) and Station 5154+34 (downstream). Specifications of the bypass pipe are as follows:

- Grade (API, ASTM...): X52 and X60
- SMYS: 811.77 psi
- Wall thickness: 0.281
- Coating Trenton Hot Wax
- Tie-in welds NDT method X-Ray.

It is my understanding that Colonial plans to initiate operation of the bypass on or around September 22, 2016.

After reviewing your preliminary construction plans and evaluating the circumstances of the Failure and its aftermath, including the effects of the shutdown of Line 1 on gas supply in the Southeast, I approve of the construction and installation of the bypass as a temporary measure to restore service while removal of the failed segment of pipe and development of the Restart Plan continue to move forward. Colonial personnel have indicated that the security of the above-ground bypass will be ensured through 24/7 monitoring - it is expected that this monitoring effort will be maintained until the bypass is removed from service.

Please be aware that all other provisions of the CAO will continue in full force and effect during this time. If you have any questions concerning this letter or any other matter regarding the CAO, please feel free to contact me at 404-832-1150.

Thank you for your continuing cooperation in this matter.

Sincerely,

James Ortiko
Director, Southern Region, Pipeline & Hazardous Materials Safety Administration, Office of for Pipeline Safety

cc: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, Office of Pipeline Safety, PHMSA

CERTIFIED MAIL - RETURN RECEIPT REQUESTED [9214 8969 0099 9790 1406 0626 13]

From: Urisko, James (PHMSA)
Sent: Friday, September 23, 2016 6:48 PM
To: Lohoff, Drew
Cc: Schwarzkopf, Michael (PHMSA); Taylor, Chris (PHMSA)
Subject: RE: Request for Additional Time to Respond (and Request a Hearing) to the Corrective Action Order

Drew,

Based on the estimated start and duration of excavation of the failed segment of Line 1, an extension to Colonial's time of response to the CAO is granted through October 14 2016. A formal letter granting the extension will be issued from PHMSA's Southern Region shortly. Please feel free to contact me with any questions or concerns.

Sent with Good (www.good.com)

From: Lohoff, Drew <dllohoff@colpipe.com>
Sent: Thursday, September 22, 2016 12:45:13 PM
To: Urisko, James (PHMSA)
Cc: Schwarzkopf, Michael (PHMSA); Taylor, Chris (PHMSA)
Subject: Request for Additional Time to Respond (and Request a Hearing) to the Corrective Action Order

James,

As you are aware, PHMSA issued a Corrective Action Order (CAO) to Colonial on September 16, 2016. Under the terms of the CAO, colonial has ten (10) days to respond to the CAO, or by Monday, September 26, 2016, pursuant to 49 C.F.R. Part 190.233(c). Colonial has been working cooperatively

with PHMSA, as well as other federal, state and local agencies including the U.S. Environmental Protection Agency, to investigate the cause and failure mechanism of the accident, effect repairs and initiate corrective actions to comply with the CAO. Given the serious concerns about adequacy of fuel supply on the East Coast, Colonial coordinated with PHMSA on construction of a bypass to resume service more quickly while investigations and repairs continue at the failure site. That option was approved via letter and subsequent clarifying email from PHMSA issued on September 20, 2016, and further clarified via letter from PHMSA issued on September 21, 2016. In order to allow time for Colonial to implement that alternative option to alleviate fuel supply concerns expeditiously and to further proceed with the response, investigation and identification of the failure mechanism, the Company requests an extension of the 10-day response time for the CAO for Colonial to respond, including potentially requesting a hearing, to the CAO until 10 days after such time as Colonial exposes the pipeline at the failure location. At this time, Colonial anticipates beginning excavation at the failure location on Monday, September 26th.

Colonial shares PHMSA's commitment to public safety and the Company will continue to work with the Agency to address the incident. Thank you for your consideration and I look forward to your confirmation or response

Best Regards,
Drew

Drew Lohoff
Manager, PHMSA Compliance
Colonial Pipeline Company
Direct: (678) 762 2872
Cell: (678) 372-2063

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 28, 2016

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Felt,

On September 16, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued a Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line 1 (Line 1), in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Atlanta Junction Station in Atlanta, Georgia.

As you know, the CAO states that Colonial may contest its issuance in writing or by requesting a hearing within 10 days of receipt of the Order. On Thursday, September 22, 2016, we received Drew Loholt's email in which he requested an extension to the required time to respond.

I am granting Colonial an extension through October 14, 2016. This is based on the current estimated time required to expose the failure location.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

VIA CERTIFIED MAIL AND FAX TO: (678) 762-2466

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

OCT 13 2016

Re: CPF No. 2-2016-500501

Dear Mr. Felt:

Enclosed is an Amended Corrective Action Order issued in the above-referenced case, requiring Colonial Pipeline Company to take certain corrective actions with respect to the failure on its Pipeline One (Line #1), that occurred on September 9, 2016, near Pelham, Alabama.

Service is being made by certified mail and facsimile. Service of the Amended Corrective Action Order by electronic transmission is deemed complete upon transmission and acknowledgement of receipt, or as otherwise provided under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon completion of service.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

Enclosure

cc: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, Office of Pipeline Safety, PHMSA
Mr. James Urisko, Regional Director, Southern Region, Office of Pipeline Safety, PHMSA

U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590

In the Matter of	)	
Colonial Pipeline Company,	)	**CPF No. 2-2016-5005H**
Respondent.	)	

AMENDED CORRECTIVE ACTION ORDER

Purpose and Background:

This Amended Corrective Action Order (Amended CAO) is being issued under the authority of 49 U.S.C. § 60112 to require Colonial Pipeline Company (Colonial or Respondent), to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with the recent failure on its Colonial's Pipeline One (Line #1).[1]

On September 9, 2016, a reportable accident occurred on Colonial's Line #1, a hazardous liquid pipeline in Shelby County, Alabama, approximately three miles from the town of Pelham, Alabama (Failure). The Failure resulted in the release of approximately 7,370 barrels (bbls) of gasoline into a pond (Pond #2) approximately 460 feet north of Colonial's Line #1. Line #1 transports gasoline from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a 202-mile section of Line #1 that runs from Collins, Mississippi, to Pelham, Alabama. Colonial operates a parallel pipeline that runs adjacent to Line #1, Pipeline Two (Line #2), that is approximately 40 feet apart from Line #1 at the Failure Site. Line #2 transports petroleum product from Epes, Alabama, to Anderson, South Carolina.

On September 16, 2016, PHMSA issued a Corrective Action Order (CAO) to Colonial. The CAO required Colonial to shut down failed section on Line #1 and carry out mechanical and metallurgical testing and failure analysis of the failed section of pipe. At the time, the location of the Failure and the extent of the environmental impact were unknown. This Amended

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[1] Colonial operates roughly 5,500 miles of hazardous liquid transmission pipeline within the United States. The pipelines travel through the states of Texas, Louisiana, Mississippi, Alabama, Georgia, North and South Carolina, Virginia, Maryland, Pennsylvania, New Jersey, and New York. Branches from the main lines also extend into Tennessee. The system delivers a daily average of approximately 100 million gallons of liquid petroleum products throughout the Southern and Eastern United States.

Corrective Action Order replaces and supersedes the CAO issued to Colonial on September 16, 2016.

Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the accident.

The preliminary findings in the Original CAO noted the failure and related information and details about the defect discovered as a result of the September 9, 2016 failure. Since that time, the following events have occurred and certain information has been discovered or clarified:

Amended Preliminary Findings:

1) Line #1 is a 36-inch diameter hazardous liquid pipeline that runs from Houston, Texas, to Greensboro, North Carolina. The Failure occurred on a segment of Line #1 that runs from Collins, Mississippi, to Respondent's Pelham Station, in Pelham, Alabama (Affected Segment). The Failure occurred at Station 5155+57 on a section of Line #1 that runs from Colonial's downstream Cahaba River block valve, near Station 5055+00, to Colonial's Pelham Station in Pelham, Alabama, near Station 5545+17. A pond (Pond #2) outside the company's right-of-way is approximately 460 feet from the Failure Site on Line #1 (Failure Site). Two other ponds are in the vicinity of the failed section: Pond #1 to the south of Line #1, and Pond #3 to the north of Pond #2. All referenced ponds are man-made reclamation and evaporation ponds used during historic rural surface strip mining.

2) The Affected Segment was constructed in 1963 and is composed of 36-inch diameter, 0.281-inch wall thickness, American Petroleum Institute (API) 5L, X52 pipe. The pipe generally has asphalt enamel coating and a double-submerged arc-welded (DSAW) seam type, and was manufactured by the National Tube Company. Several sections of the Affected Segment were subject to replacement and recoat projects since original construction, and may have more modern pipe and/or types of coating.

3) Pond #2 is located near Station 5154+13, on Line #1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama. Pond #2 is bounded by Line #1 to the south and another pond, Pond #3, to the north. Pond #3 is also a man-made reclamation and evaporation pond used during historic rural surface strip mining.

4) From September 12-13, 2016, Colonial installed stopple fittings upstream and downstream of the Failure location in order to begin drain-down of the line before excavation of the release location. The downstream stopple was tapped and plugged and work continued on the upstream stopple installation. On September 14, 2016, the upstream stopple was completed at 1:30 AM CDT. Nitrogen injections began at 3:00 AM CDT and initial drain-up operations were completed that evening.

5) As of 8:00 AM CDT on September 15, 2016, Colonial personnel announced that sampling indicated the presence of dissolved constituents in Pond #3.

6) At approximately 12:30 PM CDT on September 16, 2016, Colonial officials announced that its personnel had discovered a culvert below the water line in Pond #2. Colonial officials further noted this culvert connects to Pond #3, and that they believe the dissolved constituents flowed from Pond #2, through this culvert, into Pond #3.

7) On September 16, 2016, the amount of product extracted from the pipe remained at 880 bbls. Adequate pressure to evacuate the product remaining in the stoppled section of the line could no longer be provided by injecting nitrogen into the line.

8) As of the 9:00 AM CDT on September 17, 2016, the amount of product extracted from the pipe was 1,075 bbls. Colonial installed a temporary pig launcher and receiver in order to use a pig to remove the remaining product. Colonial used water to push the pig to complete the product removal effort. There was no estimate on volume remaining in stoppled section of the pipe.

9) On September 20, 2016, PHMSA approved the installation of a 36-inch diameter temporary 500-foot bypass line on the Isolated Segment to facilitate limited pipeline operation of Line #1. Specifications of the bypass pipe are as follows:

   a. Grade (API): X52 and X60
   b. SMYS: 811.77 psi
   c. Wall thickness: 0.281-inch
   d. Coating Fusion Bond Epoxy and Trenton Hot Wax
   e. Tie-in welds NDT method X-Ray.
   f. Upon startup of the bypass, the bypass has been operating at a 20% reduction from the highest steady-state pressure for the 90 days prior to shutdown of Line #1. This pressure reduction will remain in place throughout operation of the bypass.

10) On September 22, 2016, at 8:45 PM CDT, the temporary bypass reached full operational status. Due to the artificial lighting provided by Colonial, Director approved a non-daylight start in a supplemental letter, dated September 21, 2016. Colonial personnel are monitoring the security of the above-ground bypass at all times until the bypass is removed from service.

11) On September 28, 2016, Colonial started excavation of the failed section of Line #1. The failed section of Line #1 was excavated on September 29, 2016, around 1:00 PM CDT. A small crack was found on a buckle that had not been previously identified or known by Colonial. According to Colonial, the buckle had not been identified in the 2014 internal assessment or geometry data and, pending verification, was not present during a 2015 recoat project.

Determination of Necessity for Corrective Action Order and Right to Hearing:

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action, as appropriate. The basis for making the determination that a pipeline facility is or would be hazardous, requiring corrective action, is set forth both in the above-referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112 and the regulations promulgated thereunder provide for the issuance of a Corrective Action Order, without prior notice and opportunity for hearing, upon a finding that failure to issue the Order expeditiously would result in the likelihood of serious harm to life, property, or the environment. In such cases, an opportunity for a hearing and expedited review will be provided as soon as practicable after the issuance of this Order.

After evaluating the preliminary findings in the CAO and the foregoing additional preliminary findings of fact, I find that continued operation of the pipeline without corrective measures is or would be hazardous to life, property, or the environment. Additionally, I have considered the undetermined cause of the Failure and the ongoing investigation; the location of the Failure; the age of the pipeline and the history of known problems or failures on pipelines being owned and operated by Respondent; the proximity of the pipeline to populated areas or other unusually sensitive ecological areas; the deceased wildlife and vegetation near the Failure Site; and the soil and water contamination in the vicinity of the Failure Site. I therefore find that a failure to issue this Order expeditiously to require immediate corrective action would result in the likelihood of serious harm to life, property, or the environment.

Accordingly, this Amendment to the Corrective Action Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Amended Corrective Action Order are effective upon receipt.

The actions required by this Amended Corrective Action Order are in addition to the requirements that apply to under the CAO issued on September 16, 2016.

Within 10 days of receipt of this Order, Respondent may contest its issuance obtain expedited review either by answering in writing or requesting a hearing under 49 C.F.R. § 190.211, to be held as soon as practicable under the terms of such regulation, by notifying the Associate Administrator for Pipeline Safety in writing, with a copy to the Director, Southern, PHMSA (Director). If Respondent requests a hearing, it will be held telephonically or in-person in Southern Region office or Washington, D.C.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. In that event, PHMSA will notify Respondent of any additional measures that are required and an amended Order issued, if necessary. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Actions:

Definitions:

Affected Segment means the segment of Respondent's Line #1 running from Collins, Mississippi, to Colonial's Pelham Station in Pelham, Alabama.

Isolated Segment means the segment of Respondent's Line #1 running from Colonial's Cahaba River block valve, near Station 4984+90, to Station 5545+17, 10.6 miles from Colonial's Pelham Station in Pelham, Alabama.

Director means Director, Southern Region, PHMSA.

Failure Site means the section on the Isolated Segment where the leak occurred on September 9, 2016 at Station 5155+57.

Pursuant to 49 U.S.C. § 60112, I hereby order Colonial to immediately take the following corrective actions for the Affected Segment and Isolated Segment.

1. ***Restart Plan***. Prior to resuming operation of the *Isolated Segment*, Colonial must develop and submit a written *Restart Plan* to the Director for prior approval. This applies to the restart of Line #1 upon its permanent repair, and removal of the temporary bypass.

   a. The Director may approve the *Restart Plan* incrementally without approving the entire plan, but the *Isolated Segment* cannot resume operation until the *Restart Plan* is approved in its entirety.

   b. Once approved by the Director, the *Restart Plan* will be incorporated by reference into this Order.

   c. The *Restart Plan* must include procedures for removal of the temporary bypass and provide evidence that all mandated actions required for such removal have been completed.

   d. The *Restart Plan* must include procedures to safely return the *Isolated Segment* to service and provide evidence that all mandated actions required prior to restart are adequately completed.

   e. The *Restart Plan* must specify a daylight restart and must include advance communications with local emergency response officials.

   f. The *Restart Plan* must provide for a review of the *Isolated Segment* for conditions similar to those in which the Failure occurred. This review should include a review of Colonial's construction, operating and maintenance (O&M) and integrity management records such as in-line inspection (ILI) results, hydrostatic tests, root cause failure analysis of prior failures, aerial and ground patrols, corrosion, cathodic protection, excavations and pipe replacements. Colonial must address any findings that require remedial measures to be implemented prior to restart.

g. The *Restart Plan* must include documentation of the completion of all mandated actions and a management of change plan to ensure that all procedural modifications are incorporated into Colonial's operations and maintenance manual.

h. The *Restart Plan* must provide for hydrostatic pressure testing of the replacement pipe.

i. Within 90 days of restarting the *Isolated Segment*, perform an ILI to ensure that there has been no metal loss, deformation, or other damage to the *Affected Pipeline*.

2. ***Pressure Restriction.*** After the removal of the temporary bypass and receiving approval from the Director to restart Line #1, Colonial must maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the *Affected Segment* within the 90-days prior to discovery. At no point within the Affected Segment shall the pressure exceed eighty percent (80%) of the highest steady state pressure recorded during the 90 days prior to discovery of the Failure.

3. ***Removal of Pressure Restriction.***

a. Upon written request from Colonial, the Director may allow the removal or modification of the pressure restriction when a reliable engineering analysis demonstrates that the pressure increase is safe, taking into consideration all known defects, anomalies, completion of the Repair Plan, and the operating parameters of the Affected Segment.

b. The Director may allow the temporary removal or modification of the pressure restrictions upon a written request from Colonial, demonstrating that temporary mitigative and preventive measures will be implemented prior to and during the temporary removal or modification of the pressure restriction. The Director's determination will be based on the failure cause and provision of evidence that preventative and mitigative actions taken by the operator provide for the safe operation of the *Affected Segment* during the temporary removal or modification of the pressure restriction. Appeals to determinations of the Director in this regard will be decided by the Associate Administrator for Pipeline Safety.

4. ***Mechanical and Metallurgical Testing.*** Within 45 days of excavation and exposure of the Failure Site, Colonial must complete mechanical and metallurgical testing, as well as a failure analysis of the failed pipe, including an analysis of soil samples and any foreign materials. The testing and failure analysis must be completed by an independent laboratory or expert. The testing and analysis must be completed in accordance with the following instructions:

a. Document the chain-of-custody when handling and transporting the failed pipe section and other evidence from the Failure Site;

b. Within 10 days of removing the failed pipe, develop and submit the testing protocol and the proposed testing laboratory to the Director for prior approval;

c. Prior to beginning the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow for an OPS representative to witness the testing;

d. Ensure the testing laboratory distributes all reports whether draft or final in their entirety to the Director at the same time they are made available to Colonial; and

e. The Director may grant an extension of time, in accordance with **Item 13 *Extensions of Time*,** to complete the Mechanical and Metallurgical Testing.

5. ***Remedial Work Plan.*** Within 60 days of receipt of this Order, develop and submit to the Director for prior approval a written Remedial Work Plan (RWP) that includes corrective measures. The RWP must fully address all known or suspected factors that caused or contributed to the Failure and must include, as applicable:

a. All planned pipeline repairs or changes to operations and maintenance, personnel qualification or training, or corrosion control procedures or activities required to address all threats identified by the analysis and must contain a schedule for performing these repairs or changes. Repairs of pipeline segments must comport at a minimum with the deadlines set out in 49 C.F.R. § 195.452(h)(4). All conditions defined in 49 C.F.R. § 195.452(h)(4)(i) through (iv) must be repaired. All repairs must be performed in compliance with 49 C.F.R. § 195.422.

b. The comprehensive analysis and RWP must be submitted no later than 150 days after excavation of the failed pipe to the Director, Southern Region, OPS, for review and approval.

c. Threats identified in areas where a pipeline failure could affect a high consequence area must be properly addressed by and incorporated into Colonial's Integrity Management Program (IMP). Submit all resulting changes to your IMP no later than four months after the date of this Order for the approval of the Director.

d. The comprehensive analysis and RWP, along with any resulting changes to Colonial's IMP, must be reviewed by an independent risk assessment expert prior to submission to the Director, to verify that Colonial has included all known accidents and occurrences, has properly identified potential and existing threats, and determined that the RWP is adequate to address the identified threats.

6. ***Implementation of Work Plan.*** Implement the Remedial Work Plan as it is approved by the Director, including any revisions to the plan.

7. ***Root Cause Failure Analysis.***

a. Within 90 days of excavation and exposure of the Failure Site, Colonial must complete a root cause failure analysis (RCFA) and submit a final report of this RCFA to the Director. The RCFA must be supplemented/facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing

to the failure. The final report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.

b. The Director may grant an extension of time, in accordance with **Item 13 *Extensions of Time*,** to complete the RCFA. If an extension of time is granted, Colonial must complete a preliminary RCFA of the Failure Site and submit a report of this preliminary RCFA to the Director. The preliminary RCFA must be supplemented/facilitated by an independent third-party acceptable to the Director and must document the decision making process and all factors contributing to the Failure including, but not limited to, manufacturing defects, operational or maintenance errors, and natural disasters. The preliminary report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.

8. ***Emergency Response Plan and Training Review***. Colonial must review and assess the effectiveness of its emergency response plan with regards to the Failure. In its review, Colonial should seek input local, state and federal agencies responding to release and investigating the cause of the failure. Include in the review and assessment the on-scene response and support, coordination, and communication with emergency responders and public officials. Also, include a review and assessment of the effectiveness of its emergency training program. Colonial must amend its emergency response plan and emergency training, if necessary, to reflect the results of this review. The documentation of this *Emergency Response Plan and Training Review* must be available for inspection by OPS or provided to the Director, if requested.

9. ***CAO Documentation Report (CDR)***. Colonial must create and revise, as necessary, a CAO Documentation Report (CDR). When Colonial has concluded all the items in this Order, it will submit the final CDR in its entirety to the Director. This will allow the Director to complete a thorough review of all actions taken by Colonial with regards to this Order prior to approving the closure of this Order. The intent is for the CDR to summarize all activities and documentation associated with this Order in one document.

   a. The Director may approve the CDR incrementally without approving the entire CDR.

   b. Once approved by the Director, the CDR will be incorporated by reference into this Order.

   c. The CDR must include but not be limited to:

      i. Table of Contents;

      ii. Summary of the pipeline failure of September 9, 2016, and the response activities;

      iii. Summary of pipe data/properties and all prior assessments of the *Affected Segment*;

iv. Summary of all tests, inspections, measurements, evaluations, and analysis required by the Order;

v. Summary of the Mechanical and Metallurgical Testing as required by the Order;

vi. Summary of the Remedial Work Plan as required by the Order;

vii. Summary of the RCFA with all root causes as required by the Order;

viii. Lessons learned while completing this Order;

ix. A path forward describing specific actions Colonial will take on its entire pipeline system as a result of the lessons learned from work on this Order; and

x. Appendices (if required).

Other Requirements:

10. ***Reporting.*** Colonial must submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Order; and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report is due on January 15, 2017. The Director may change the interval for the submission of these reports.

11. ***Documentation of the Costs.*** It is requested but not required that Respondent maintain documentation of the costs associated with implementation of this Order. Include in each monthly report submitted, the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.

12. ***Approvals.*** With respect to each submission that under this Order requires the approval of the Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that Respondent modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, Respondent shall proceed to take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, Respondent must correct all deficiencies within the time specified by the Director, and resubmit it for approval.

13. ***Extensions of Time.*** The Director may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension.

The actions required by this Amendment to the CAO are in addition to and do not waive any requirements that apply to Respondent's pipeline system under the Original CAO, and under

49 C.F.R. Part 195, under any other order issued to Respondent under authority of 49 U.S.C. § 60101, *et seq.*, or under any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator will be final.

Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. § 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. § 552(b).

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

In your correspondence on this matter, please refer to CPF No. and for each document you submit, please provide a copy in electronic format whenever possible.

The terms and conditions of this Amended Corrective Action Order are effective upon receipt.

Alan K. Mayberry
Acting Associate Administrator
for Pipeline Safety

OCT 13 2016
Date Issued

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 14, 2016

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Felt:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line #1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Pelham Station in Pelham, Alabama. The Amended CAO provided updated findings and revised the "Required Corrective Actions" of the original CAO, dated September 16, 2016.

As you know, Item 4 of the Amended CAO requires that Colonial submit for approval the testing protocol and independent testing laboratory proposed to conduct the testing. PHMSA Southern Region received the metallurgical evaluation plan in electronic format on October 6, 2016, along with confirmation that Colonial intends to use BMT Fleet to conduct the independent laboratory testing of the failed section of pipe.

This letter serves as approval of the submitted testing protocols, as well as the proposed independent laboratory. If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

733 Peachtree Street Ste. 600
Atlanta, GA 30303

VIA CERTIFIED MAIL AND FAX TO: (678) 762-2466

October 21, 2016

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Felt:

On September 16, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued a Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to the September 9, 2016 failure on Colonial's hazardous liquids Line 1, in Shelby County, Alabama. On October 13, 2016, PHMSA issued an Amended CAO, supplementing the Preliminary Findings of the original CAO, as well as prescribing revised Required Corrective Actions.

Colonial has requested clarification regarding whether terms of the original CAO remain in effect or if the Amended CAO supersedes and replaces the terms of the original CAO. The Required Corrective Actions in the Amended CAO replace and supersede terms required in the original CAO. The Preliminary Findings in the original CAO are incorporated into the Amended CAO, except where the Amended CAO has provided corrected or updated information.

Please be aware that all other provisions of the CAO will continue in full force and effect. If you have any questions concerning this letter or any other matter regarding the CAO, please contact me at 404-832-1150.

Thank you for your continuing cooperation in this matter.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

CC: Ms. Linda Daugherty, Deputy Associate Administrator for Field Operations, Office of Pipeline Safety, PHMSA

CERTIFIED MAIL - RETURN RECEIPT REQUESTED [NO. 7015 0640 0000 5217 2505]

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 18, 2016

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Felt:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line #1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Pelham Station in Pelham, Alabama. The Amended CAO provided updated findings and revised the "Required Corrective Actions" of the original CAO, dated September 16, 2016.

As you know, Item 1 of the Required Corrective Actions requires that Colonial submit for approval the *Restart Plan* prior to removal of the temporary bypass and resuming operation of the *Isolated Segment*. PHMSA Southern Region received the final *Restart Plan* in electronic format on November 15, 2016.

This letter serves as approval of the submitted *Restart Plan*. If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Grisko
Director, Office of Pipeline Safety
PHMSA Southern Region

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 18, 2016

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Felt:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line #1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Pelham Station in Pelham, Alabama. The Amended CAO provided updated findings and revised the "Required Corrective Actions" of the original CAO, dated September 16, 2016.

As you know, Item 2 of the Required Corrective Actions requires that Colonial maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the *Affected Segment* within 90-days prior to discovery. Pursuant to Item 3(b) of the Required Corrective Actions, Colonial submitted a request for temporary removal of the pressure restrictions in electronic format via email from Drew Lohoff on November 17, 2016. This submittal included Colonial's proposed temporary mitigative measures, as well as an analysis and justification for the safe operation of the *Affected Segment* during the temporary removal of the pressure restrictions.

This letter serves as approval for a 90-day temporary removal of the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions, referenced to the date of this letter. Should any deficiencies or threats related to the CR-91 failure mechanism be identified during this time, Colonial must immediately notify the Southern Region Director and, within five (5) hours of identification of the deficiency or threat, initiate steps to reinstate the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions. The pressure restrictions will remain in place until remediation of the deficiency or threat is completed and the Southern Region Director approves reinstatement of the temporary removal of the pressure restriction.

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

Chai, Nancy (PHMSA)

From:	Lohoff, Drew <dlohoff@colpipe.com>
Sent:	Wednesday, December 07, 2016 6:01 PM
To:	Urisko, James (PHMSA)
Subject:	CPF No. 2-2016-5005H (ACAO) – Request for Extension of Time Relating to Deadlines under CA No. 7. (RCFA) and CA No. 5. (RWP)
Attachments:	Extension Request

James,

For the reasons set forth below, and in the attached email from DNV, the independent third party facilitating the Root Cause Failure Analysis (RCFA) for Colonial under the Amended Corrective Action Order (ACAO), this email is to seek PHMSA's approval to extend deadlines set forth in the ACAO as follows:

1. Corrective Action No. 7 Root Cause Failure Analysis (to complete a RCFA and submit a final report of the RCFA): Colonial requests approval to extend the deadline by 30 days. Colonial seeks a revised due date under CA No. 7.a. of January 27, 2017 Please note that although Colonial is requesting an extension until January 27, 2017 to complete and submit a Final Report relating to the RCFA, Colonial anticipates discussing preliminary findings of the RCFA with PHMSA prior to submittal of the Final Report to satisfy the terms of CA No. 7.b.

2. Corrective Action No. 5 Remedial Work Plan (to develop and submit a Remedial Work Plan): Colonial seeks PHMSA's approval to extend the deadline until 30 days following Colonial's submittal of the RCFA, for a revised due date of February 26, 2017.

3. Corrective Action No. 5.b. Remedial Work Plan (to submit a comprehensive analysis and RWP): Colonial seeks PHMSA's approval to extend the deadline by 30 days, for a revised due date of March 28, 2017.

4. Corrective Action No. 5.c. Remedial Work Plan (to submit for PHMSA approval changes made to Colonial's IMP relating to threats identified in areas where a pipeline failure could affect a HCA). Finally, this email seeks PHMSA's approval to extend the deadline for this obligation until 30 days following Colonial's submittal of the comprehensive analysis and RWP under CA No. 5.b. (above), for a revised due date of April 27, 2017.

As you are aware, Item 13. Extensions of Time of the ACAO authorizes the Director to grant an extension of time for compliance with any of the terms of the ACAO upon a written request timely submitted demonstrating good cause for the extension. To that end, and consistent with our discussions, attached please find an email dated Dec 7, 2016 from DNV setting forth the basis for an extension relating to the CA No. 7. Root Cause Failure Analysis Colonial believes the reasons set forth in DNV's letter demonstrates good cause for PHMSA to grant Colonial the requested extension relating to submittal of the RCFA. The additional extensions requested above regarding to the CA No. 5 items are necessary to allow time for the results of the RCFA to be factored into those items (i.e., the RWP and the comprehensive analysis and changes to the IMP).

To summarize, if granted, the new deadlines under CA No. 7. and CA No. 5. would be as follows:

- CA No. 7. – Complete a ACFA and submit a Final Report – by January 27, 2017
- CA No. 5. – Develop and submit for prior approval a written Remedial Work Plan (RWP) – by February 26, 2107
- CA No. 5.b. – Submit a comprehensive analysis and RWP – by March 28, 2017
- CA No. 5.c. – Submit changes made to Colonial's IMP relating to threats identified in areas where a pipeline failure could affect a HCA – by April 27, 2017

Colonial appreciates PHMSA's consideration of this request. Please feel free to contact me if you have any questions or would like to discuss further.

Best Regards,

Drew

Drew Lohoff
Acting Director, Compliance
Colonial Pipeline Company
Direct: (678) 762-2872
Cell: (678) 372-2063

Chai, Nancy (PHMSA)

From: Padgett, Barbara <Barbara.Padgett@dnvgl.com>
Sent: Wednesday, December 07, 2016 4:19 PM
To: Lohoff, Drew
Subject: Extension Request

Hello Drew,

DNV GL would like to request an extension to the Root Cause Failure Analysis (RCFA) discussed in Section 7 of the Corrective Action Order (CAO) issued by PHMSA to Colonial on October 13, 2016. An extension of 30 days is requested in order to perform supplemental analyses in support of the RCFA (i.e. completion date January 27, 2017). These supplemental analyses are associated with the finite element modeling / numerical analyses of the probable contributing factors that led to the buckling of Line 1. We have constructed a representative model of the affected pipe section and have begun sensitivity studies of various loading conditions to reproduce the buckle morphology observed at the failure location. This information will be compared to known site conditions and operating parameters to determine the probable root causes of the failure. Given the time requirement to complete this modeling, additional time will be needed to determine the root causes associated with each of the loading conditions that may have contributed to the failure.

As always, given the sensitivity and urgency, DNV GL will work as quickly as possible to complete the RCFA.

Thank you,
Nikki

Best regards
for Det Norske Veritas (U.S.A.), Inc.

Barbara N. Padgett (Nikki), Ph.D.
Senior Engineer, Incident Investigation
DNV GL - North America Oil & Gas

E-mail: barbara.padgett@dnvgl.com
Direct: +1.614.761.6960
Fax: +1.614.761.1633
www.dnvgl.com

DNV·GL

DNV and GL have merged to form DNV GL - Read more here: www.dnvgl.com/merger

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This e-mail and any attachments thereto may contain confidential information and/or privileged material protected by copyright rights. If you are not the intended addressee of this message, please delete it and inform the sender by return e-mail and destroy the message and its attachments. Unauthorized use, disclosure, or distribution of this e-mail or its contents is prohibited.
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U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

December 12, 2016

Mr. Tim Felt
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Felt:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line 1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Pelham Station in Pelham, Alabama. The Amended CAO provided updated findings and revised the "Required Corrective Actions" of the original CAO, dated September 16, 2016.

Item 5 of the Amended CAO's Required Corrective Actions requires Colonial to develop and submit for approval a written Remedial Work Plan (RWP) within 60-days of receipt of the Amended CAO. Furthermore, Item 5(b) requires Colonial to submit a comprehensive analysis of the Failure and the RWP within 150-days of excavation of the failed pipe. Item 5(e) requires that all changes to Colonial's Integrity Management Plan (IMP) resulting from analysis of the Failure be submitted for approval no later than 4-months from the date of the Amended ACAO.

Item 7 of the Amended CAO's Required Corrective Actions requires Colonial to submit a final report documenting the results of the Root Cause Failure Analysis (RCFA) within 90-days of excavation and exposure of the failure site. Furthermore, Item 7(b) requires that, in the event of an extension to the deadline for submittal of the RCFA, Colonial must complete a preliminary RCFA of the Failure and submit a report of the preliminary RCFA to the Director.

Pursuant to Item 13 of the Required Corrective Actions, Colonial submitted a request for a 30-day extension to the deadline for submittal of the RCFA. This request was received in electronic format via email from Drew Lohoff on December 7, 2016. The extension request

was based on the need for additional analyses, per the independent third-party conducting the RCFA.

This letter serves as approval for a 30-day extension to the deadline for submittal of the RCFA. The final report documenting the RCFA will be due no later than January 27, 2017. In keeping with the requirements of Item 7(b) of the Amended CAO, it is understood that Colonial will be prepared to present and discuss the preliminary findings of the RCFA by January 10, 2017 (date subject to scheduling and availability).

Further, in an effort to ensure that all factors contributing to the accident are captured in the RWP, I am revising the deadline for submission of the comprehensive analysis and RWP for approval to be no later than 180-days after excavation of the failed pipe. The deadline for submittal of changes to Colonial's IMP, as required by Item 5(c), is revised to be no later than 4-months from OPS Southern Region's receipt of the final RCFA.

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

From: Lohoff, Drew [mailto:dlohoff@colpipe.com]
Sent: Friday, February 17, 2017 4:01 PM
To: Uriako, James (PHMSA) <james.uriako@dot.gov>
Cc: Schwarzkopf, Michael (PHMSA) <Michael.Schwarzkopf@dot.gov>; Taylor, Chris (PHMSA) <Chris.Taylor@dot.gov>; Bernhardt, Jonathan <jbernhardt@colpipe.com>
Subject: Colonial Request for Removal of Pressure Restriction

James,

As discussed, attached is Colonial's request for (1) removal of the pressure restriction in the Affected Segment and (2) a request for extension on completion of the ILI metal loss data.

If you have any questions, please feel free to call.

Best Regards,
Drew

Drew Lohoff
Acting Director, Compliance
Colonial Pipeline Company
Direct: (678) 762-2872
Cell: (678) 372-3063

D. A. Lohoff
Director, Compliance

Phone: (678) 762-2872
Cell: (678) 372-2063
e-mail: dlohoff@colpipe.com

February 17, 2017

VIA CERTIFIED MAIL AND E-MAIL

Mr. James Urisko
Regional Director, Southern Region
Pipeline and Hazardous Materials Safety Administration
233 Peachtree St. NE, Suite 600
Atlanta, GA 30303

Re: CPF No. 2-2016-5005H (1) Request for Removal of Pressure Restriction; and (2) Status Update on ILI Data and Request for Extension for Completing ILI Tool Run

Dear Mr. Urisko:

On October 13, 2016, PHMSA issued an Amended Corrective Action Order (ACAO) to Colonial in response to the failure of Line 1 that occurred on September 9, 2016. Under the "Required Corrective Actions" of the ACAO, Section 2 requires, upon removal of the Line 1 Bypass and receiving approval to restart the line, "a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the Affected Segment within the 90-days prior to discovery." The ACAO defines the Affected Segment as the segment of "Line #1 running from Collins, Mississippi, to Colonial's Pelham Station in Pelham, Alabama." Section 3(b) of the ACAO provides that Colonial may request a temporary removal of the pressure restriction when "temporary mitigative and preventative measures will be implemented prior to and during the temporary removal... of the pressure restriction." On November 17, 2016, Colonial requested, and on November 18, 2016, PHMSA approved, a 90-day temporary removal of the pressure restriction, in light various mitigative and preventative measures implemented by Colonial. Pursuant to the terms of the ACAO (see Section 3(a)), Colonial now requests removal of the pressure restriction.

As indicated above, Colonial requested, and received approval from PHMSA, for a temporary removal of the pressure restriction. As previously indicated in Colonial's letter to request temporary removal of the pressure restriction, a series of preventive and mitigative (P&M) measures were implemented by Colonial following the repair and restart of Line 01 across the Affected Segment. These measures included an increased frequency for aerial patrol along the Affected Segment and increased monitoring of line pressure in Colonial's Control Center. Through implementing these P&M measures, there have been no reported pressure excursion, no observations indicative of a release or unauthorized encroachment activity, and/or no signs of subsidence of the ground along the Affected Segment right of way. Colonial will continue these efforts and maintain the expanded P&M measures until receiving approval for removal of the pressure restriction.

As part of the requirements for the temporary removal of the pressure restriction, and as reported in Colonial's 1st Quarterly Report to PHMSA, Colonial completed a Pipe Wall Assessment (PWA) inspection program for locations within the Affected Segment that were previously recoated and the extent of the excavation for the recoat work exceeded 100 feet. The PWA inspection technique identified signs of pipe wall stress concentration. Locations selected for PWA inspection were based on a buckle susceptibility evaluation process and prioritization criteria for analysis of locations with similar characteristics to the failure site. Based on the evaluation process, locations were selected for inspection using the PWA technology, which could be indicative of locations where buckles are present. None of the other areas inspected using the PWA method showed signs of pipe wall stress that could be associated with excavation and backfilling of areas recoated. This included excavation and direct inspection of two (2) locations within the Affected Segment[1] where prior recoating activities occurred, each of which showed no buckles present on Line 01.

In addition, and as mentioned previously, Colonial completed two separate in line inspections (ILIs) on the Affected Segment with an ILI Combo (MFL and caliper) tool on December 6 and December 19, 2016, as reported in Colonial's 1st Quarterly Report. The tools were damaged due to the side wing clappers of a check valve protruding into the path of the ILI tool flow. This damage was to some of the sensors for the metal loss data, but the deformation data from the caliper-arm sensors was not impacted and remained valid for use in assessing deformations along the pipe wall, including buckles. As discussed with PHMSA, analysis of the deformation tool data indicated an additional buckle upstream of the Moundville station. Colonial conferred with PHMSA regarding that finding, and PHMSA approved in a January 18, 2017, email communication that it was not necessary to reinstate the pressure restriction under the terms of the ACAO due to the identified buckle being examined and repaired. That anomaly was repaired with a Type B sleeve. No other buckles were identified based on a detailed review of the ILI inspection data.

In addition to requesting a removal of the pressure restriction for the Affected Segment, Colonial is also using this letter to request an extension for completing the ILI tool run required under the ACAO (see Section 1(i), *Restart Plan*, of the Required Corrective Actions). As noted above, the MFL ILI tool also supplies data for metal loss; however, due to the damage to the MFL sensors, the data for metal loss did not meet the ILI data quality specifications and was rejected for the purpose of metal loss assessment. Repeat tool runs had to be delayed pending the inspection and repair of station check valves. Colonial has been advised by the ILI vendor that is providing the MFL tool that the re-inspection cannot be conducted until the week of April 2, 2017. Since the incident was associated with deformation (i.e., a buckle) and not metal loss, Colonial emphasizes that the deformation data, along with other measures Colonial has taken, provide sufficient support for removal of the pressure restriction.

[1] The two locations that were excavated following completion of the PWA and ILI data integration process were both located within the "*Isolated Segment*", which is defined in the ACAO as the section of Line 01 between the stopples installed during the CR-91 response effort.

For the above reasons, Colonial believes it has adequately addressed the failure mode presented by the CR-91 incident, as set forth in the Root Cause Failure Analysis. Accordingly, Colonial respectfully requests that PHMSA approve the removal of the pressure restriction on the Affected Segment, consistent with the terms of Item 3(a) of the ACAO.

In addition, Colonial respectfully requests PHMSA grant Colonial an extension under the terms of the ACAO to complete the ILI tool run of the Affected Segment until April 15, 2017.

If you would like any additional information or have any questions related to this request, please do not hesitate to contact me at (678) 372-2063 or by e-mail at dlohoff@colpipe.com.

Respectfully,

Drew Lohoff

Drew Lohoff

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 1, 2017

Mr. John Somerhalder
Interim President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-50058I

Dear Mr. Somerhalder:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line 1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Pelham Station in Pelham, Alabama. The Amended CAO provided updated findings and revised the Required Corrective Actions of the original CAO, dated September 16, 2016.

Item 2 of the Required Corrective Actions requires that Colonial maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the *Affected Segment* within 90-days prior to discovery. Pursuant to Item 3(b) of the Required Corrective Actions, Colonial submitted a request for temporary removal of the pressure restrictions in electronic format via email from Drew Loholff on November 17, 2016. Approval of a 90-day temporary removal of the pressure restriction was granted in a letter from OPS Southern Region, dated November 18, 2016, with a subsequent extension granted through March 3, 2017. Furthermore, Item 1(i) of the Amended CAO's Required Corrective Actions required Colonial to, within 90-days of restarting the *Isolated Segment*, perform an In-line Inspection (ILI) to ensure that there has been no metal loss, deformation, or other damage to the *Affected Segment*. Discussions with Colonial personnel confirmed that a metal loss/geometry combination tool was run within the required timeframe, but the metal loss component of the tool was damaged, leaving only the deformation data recoverable. In a letter received February 17, 2017, from Drew Loholff, Colonial requested permanent removal of the pressure restrictions required by the Amended CAO's Required Corrective Actions, as well as an extension to the deadline for completion of the metal loss component of the ILI of the *Affected Segment*.

This letter serves as an extension to the deadline for completion of the metal loss ILI, with confirmation of the successful run due no later than April 15, 2017. Furthermore, this letter serves as approval for temporary removal of the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions, with the approval being valid through May 31, 2017.

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

From: Lohoff, Drew [mailto:dlohoff@colpipe.com]
Sent: Wednesday, March 08, 2017 1:36 PM
To: Uriskio, James (PHMSA) <james.uriskio@dot.gov>
Subject: CR-91 RCFA Clarification Letter

James,

Please let me know if the attached letter meets your expectations for the clarifications we discussed.

Best Regards,
Drew

Drew Lohoff
Director, Compliance
Colonial Pipeline Company
Direct: (678) 762-2872
Cell: (678) 372-3063

Colonial Pipeline Company

D. A. Lohoff
Director, Compliance

Phone: (678) 762-2872
Cell: (678) 372-2083
E-mail: dlohoff@colpipe.com

March 8, 2017

By Electronic Mail

James Uriako
Director, Southern Region
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
233 Peachtree Street N.E., Suite 600
Atlanta, Georgia 30303

Re: Colonial Pipeline Company Shelby County, Alabama CR-91 Incident
CPF No. 2-2016-5005H

Dear Mr. Uriako:

On January 27, 2017, Colonial Pipeline Company (Colonial) submitted to the Pipeline and Hazardous Materials Safety Administration (PHMSA) a Root Cause Failure Analysis (RCFA) report. The report was facilitated and prepared by Det Norske Veritas GL (DNV GL) in consultation with Colonial, in compliance with Section 7 of the Amended Corrective Action Order (ACAO), CPF No. 2-2016-5005H, issued to Colonial on October 13, 2017. Colonial agrees with the conclusion reached in the RCFA report relating to the technical root cause of the incident, *i.e.*, inadequate soil consolidation under Line 01 following maintenance/recoating activities in 2015, and is working to incorporate the identified root cause and lessons learned recommendations into its Remedial Work Plan (RWP), pursuant to Section 5 of the ACAO.

In our phone call on March 1, 2017, concerning the RCFA, you posed a question as to whether and to what extent the RCFA reference to dry soil at this incident site may have had relevance to causation. In short, the RCFA concluded that the causal factors leading to this incident were (1) inadequate support of the pipe during recoat; and (2) insufficient consolidation/compaction of soil during backfill. Taken together, DNV described the root cause to be "*inadequate soil consolidation under Line 01 following maintenance/recoating activities in 2015.*" *RCFA, p. 25.* As described in the RCFA, the 2015 project "*did not provide adequate vertical support for the pipeline*" while the pipe was exposed. *RCFA, p. 26.* That lack of support caused a deflection in the pipe which led to buckling at the site of the recoat after the project concluded and backfill was in place. Physical observation of the pipe upon exposure during response to the incident indicated sufficient deflection to have caused the buckle, and modeling by DNV confirmed that. *Id.* In addition to the lack of vertical support during recoat, DNV found that insufficient compaction during backfill, with unconsolidated soils, allowed the pipe to move once it was returned to operation after recoat. The RCFA also notes that natural conditions, specifically dessication of soil from weather or climate influences, *may* have been a contributor – but not a causal factor – to the lack of soil consolidation at the site. *RCFA, pp. 26, 28.* DNV notes,

however, that "there is insufficient information [...] to quantify the contribution of each of [such] factors." *RCFA, p. 28.*

As you know, PHMSA defines "root cause" to be that which "but for" the incident would not have occurred ("...the basic, underlying causal factor(s)...which *if removed would have prevented the accident or event from occurring*"). *PHMSA Pipeline Glossary*, www.primis.phmsa.dot.gov. DNV identified only one "root cause" of the incident: the inadequate support during recoat and insufficient consolidation of soil during backfill. DNV concluded that none of the other factors considered, such as dry soil at the site, were a "root cause" or "but for" cause of the incident. Rather, DNV identified several factors that potentially may have contributed to the incident, but ultimately found that there was insufficient data to determine the effect, if any, of such factors. As part of the RWP and comprehensive analysis, Colonial will further evaluate the contribution, if any, such factors had on the incident.

If you have any questions, for Colonial or the respective consultants involved in these issues, please do not hesitate to contact us. We would be glad to arrange a meeting or conference call if you request.

Sincerely,

Drew Lohoff

cc: DNV

DNV·GL

Final Report

Technical Root Cause Failure Analysis of CR-91 Incident – September 9, 2016

Colonial Pipeline Company
Alpharetta, Georgia

Report No.: OAPUS3078PADG (PP164617)
January 27, 2017

Colonial Pipeline Company

D. A. Lohoff
Director, Compliance

Phone: (678) 762-2872
Cell: (678) 372-2063
E-mail: dlohoff@colpipe.com

March 8, 2017

By Electronic Mail

James Urisko
Director, Southern Region
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
233 Peachtree Street N.E., Suite 600
Atlanta, Georgia 30303

Re: Colonial Pipeline Company Shelby County, Alabama CR-91 Incident
CPF No. 2-2016-5005H

Dear Mr. Urisko:

On January 27, 2017, Colonial Pipeline Company (Colonial) submitted to the Pipeline and Hazardous Materials Safety Administration (PHMSA) a Root Cause Failure Analysis (RCFA) report. The report was facilitated and prepared by Det Norske Veritas GL (DNV GL) in consultation with Colonial, in compliance with Section 7 of the Amended Corrective Action Order (ACAO), CPF No. 2-2016-5005H, issued to Colonial on October 13, 2017. Colonial agrees with the conclusion reached in the RCFA report relating to the technical root cause of the incident, *i.e*., inadequate soil consolidation under Line 01 following maintenance/recoating activities in 2015, and is working to incorporate the identified root cause and lessons learned recommendations into its Remedial Work Plan (RWP), pursuant to Section 5 of the ACAO.

In our phone call on March 1, 2017, concerning the RCFA, you posed a question as to whether and to what extent the RCFA reference to dry soil at this incident site may have had relevance to causation. In short, the RCFA concluded that the causal factors leading to this incident were (1) inadequate support of the pipe during recoat, and (2) insufficient consolidation/compaction of soil during backfill. Taken together, DNV described the root cause to be "*inadequate soil consolidation under Line 01 following maintenance/recoating activities in 2015*." *RCFA, p. 25*. As described in the RCFA, the 2015 project "*did not provide adequate vertical support for the pipeline*" while the pipe was exposed. *RCFA, p. 26*. That lack of support caused a deflection in the pipe which led to buckling at the site of the recoat after the project concluded and backfill was in place. Physical observation of the pipe upon exposure during response to the incident indicated sufficient deflection to have caused the buckle, and modeling by DNV confirmed that. *Id.* In addition to the lack of vertical support during recoat, DNV found that insufficient compaction during backfill, with unconsolidated soils, allowed the pipe to move once it was returned to operation after recoat. The RCFA also notes that natural conditions, specifically desiccation of soil from weather or climate influences, <u>*may*</u> have been a contributor – but not a causal factor – to the lack of soil consolidation at the site. *RCFA, pp. 26, 28*. DNV notes,

however, that “there is insufficient information […] to quantify the contribution of each of [such] factors.” *RCFA, p. 28*.

As you know, PHMSA defines “root cause” to be that which “but for” the incident would not have occurred (“*…the basic, underlying causal factor(s)…which if removed would have prevented the accident or event from occurring*”). *PHMSA Pipeline Glossary*, www.primis.phmsa.dot.gov. DNV identified only one “root cause” of the incident: the inadequate support during recoat and insufficient consolidation of soil during backfill. DNV concluded that none of the other factors considered, such as dry soil at the site, were a “root cause” or “but for” cause of the incident. Rather, DNV identified several factors that potentially may have contributed to the incident, but ultimately found that there was insufficient data to determine the effect, if any, of such factors. As part of the RWP and comprehensive analysis, Colonial will further evaluate the contribution, if any, such factors had on the incident.

If you have any questions, for Colonial or the respective consultants involved in these issues, please do not hesitate to contact us. We would be glad to arrange a meeting or conference call if you request.

Sincerely,

Drew Lohoff

cc: DNV

Chai, Nancy (PHMSA)

From: Loholf, Drew <dloholf@colpipe.com>
Sent: Friday, March 24, 2017 3:00 PM
To: Urisko, James (PHMSA)
Cc: Bernhardt, Jonathan
Subject: RWP Extension

James,

Could Colonial receive an extension on submitting it's Remedial Work Plan (RWP) for the CR-91 incident from next Tuesday (3/28/17) until Friday (3/31/17)? We would like this time to perform a final internal review prior to submitting. Please let me know if this is acceptable.

Best Regards,
Drew

Drew Loholf
Director, Compliance
Colonial Pipeline Company
Direct - (678) 762-2872
Cell - (678) 372-2063

Chai, Nancy (PHMSA)

From: Urisko, James (PHMSA)
Sent: Saturday, March 25, 2017 10:47 AM
To: Lohoff, Drew
Cc: Bernhardt, Jonathan
Subject: RE: RWP Extension

Thanks for the email Drew. I have no objection - this email will serve as approval of an extension to March 31, 2017, for Colonial's submittal of the CR-91 RWP. Please feel free to call or email if you need anything further.

From: Lohoff, Drew <dlohoff@colpipe.com>
Sent: Friday, March 24, 2017 3:00:14 PM
To: Urisko, James (PHMSA)
Cc: Bernhardt, Jonathan
Subject: RWP Extension

James,

Could Colonial receive an extension on submitting it's Remedial Work Plan (RWP) for the CR-91 incident from next Tuesday (3/28/17) until Friday (3/31/17)? We would like this time to perform a final internal review prior to submitting. Please let me know if this is acceptable.

Best Regards,
Drew

Drew Lohoff
Director, Compliance
Colonial Pipeline Company
Direct - (678) 762-2872
Cell - (678) 372-3063

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 28, 2017

Mr. John Somerhalder
Interim President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Somerhalder:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line 1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Pelham Station in Pelham, Alabama. The Amended CAO provided updated findings and revised the "Required Corrective Actions" of the original CAO, dated September 16, 2016.

As you know, Item 7 of the Required Corrective Actions requires that Colonial submit a *Root Cause Failure Analysis* (*RCFA*) to the Director, OPS Southern Region, for approval. In a letter dated December 12, 2016, I granted an extension to the deadline for submittal of the *RCFA* through January 27, 2017. In accordance with that letter, I received Colonial's *RCFA* submittal in electronic format on January 27, 2017. Following the Region's review of the submittal, additional information and clarification was requested. This clarification and supplemental information was provided in electronic format by Mr. Drew Lohoff in an email, dated March 8, 2017.

This letter serves as approval of the submitted *RCFA* and supplemental clarification. If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

From: Lohoff, Drew [mailto:dlohoff@colpipe.com]
Sent: Friday, March 31, 2017 4:35 PM
To: Uriiko, James (PHMSA) <james.uriiko@dot.gov>
Cc: Bernhardt, Jonathan <jbernhardt@colpipe.com>
Subject: CR-91 Remedial Work Plan

James,

Attached is a cover letter, RWP and attachments for your review. Thank you again for providing Colonial the extension until today to finalize these documents. Please reach out if you have any questions and have a great weekend!

Drew

Drew Lohoff
Director, Compliance
Colonial Pipeline Company
Direct: (678) 762-2872
Cell: (678) 372-2063

Colonial Pipeline Company

Via Email and Courier

March 31, 2017

Mr. James Uriskio
Director, Southern Region
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Office of Pipeline Safety
233 Peachtree Street, Suite 600
Atlanta, GA 30303

Re: Amended Corrective Action Order CPF No. 2-2016-5005H, Remedial Work Plan

Dear Mr. Uriskio:

Colonial Pipeline Company (Colonial) is submitting the attached Remedial Work Plan (RWP) to describe the actions to address the requirements of Amended Corrective Action Order CPF No. 2-2016-5005H (ACAO). The ACAO was issued to Colonial by the U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) on October 13, 2016. The ACAO replaced and superseded an original Corrective Action Order, dated September 16, 2016, that was issued in response to an incident on Colonial's Line 1 near County Road 91 outside of Pelham, Alabama on September 9, 2016 (CR91 Event).

The requirement for the RWP is set forth in ACAO, *Required Corrective Actions*, Section 5, *Remedial Work Plan*. As stated in the ACAO, the RWP must "fully address all known or suspected factors that caused or contributed to the Failure." The RWP has been prepared to define a scope of activities that will meet this objective. One of the key elements of the RWP is the Comprehensive Analysis for the CR-91 Event (see ACAO, Section 5 (b). The Comprehensive Analysis contained in Colonial's RWP presents a thorough assessment of available data and information pertaining to the CR91 Event, and serves as the basis for developing the scope of work and engineering assessments presented in the RWP.

The RWP was prepared in coordination with BMT Fleet Technology Ltd (BMT Fleet), whom Colonial engaged as an independent risk assessment expert, to review the RWP and verify that it meets the requirements of the ACAO (see ACAO, Section 5(d)). Consistent with the provisions of the ACAO, Colonial will seek further review by BMT Fleet Technology to review appropriate changes to Colonial's plans and procedures as a result of implementing the RWP.

Considering the significant level of work completed to date, the additional work described in this RWP, and the commitment to continuous improvement, Colonial believes that the pressure restriction specified in the ACAO for the *Affected Segment* should be permanently removed.

Colonial Pipeline Company

Colonial will prepare and submit a separate request to permanently remove the pressure restriction on Line 01 for the *Affected Segment*. The request will be submitted to the Director and be supported by an engineering analysis, including the implementation of some of the work described in this RWP.

Finally, please be aware that the RWP contains confidential business information that Colonial believes is protected from public disclosure under the Freedom of Information Act (FOIA), 5 U.S.C. § 552(b)(4) and is marked as such. Should PHMSA received a FOIA request for these documents, the Agency is required to notify Colonial and provide the Company with an adequate opportunity to substantiate its claim, prepare redactions, and/or object, if warranted.

Please contact me if you have any questions pertaining to the RWP.

Sincerely,

Drew Lohoff
Director, Compliance
Colonial Pipeline Company

Attachments

Colonial Pipeline Company

Amended Corrective Action Order (ACAO)
CPF No. 2-2016-5005H

Remedial Work Plan (RWP)

Confidential Information Protected from Disclosure under FOIA, 5 U.S.C. § 552

Appendices
Colonial Pipeline Company Remedial Work Plan
ACAO CPF No. 2-2016-5005H

Confidential Information Protected from Disclosure under FOIA, 5 U.S.C. § 552

From:	Urisko, James (PHMSA)
To:	Chai, Nancy (PHMSA)
Subject:	FW: Pressure Restriction Extension - CPF 2-2016-5005H
Date:	Friday, June 02, 2017 11:54:49 AM
Attachments:	image001.png image002.png image003.png

For the compliance registry record – this is the email referenced in the June 2 extension letter

From: Urisko, James (PHMSA)
Sent: Wednesday, May 31, 2017 4:22 PM
To: Lohoff, Drew <dlohoff@colpipe.com>
Cc: Taylor, Chris (PHMSA) <Chris.Taylor@dot.gov>; Schwarzkopf, Michael (PHMSA) <Michael.Schwarzkopf@dot.gov>
Subject: Pressure Restriction Extension - CPF 2-2016-5005H

This email serves as approval for temporary removal of the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions, with the approval being valid through August 29, 2017. A letter will be issued shortly from the Southern Region office, but this email will serve as official approval in the meantime. Please feel free to call or email with any questions.

James A Urisko, P.E.
Director, Southern Region
PHMSA Office of Pipeline Safety
(404) 832-1150
james.urisko@dot.gov

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U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 400
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 2, 2017

Mr. John Somerhalder
Interim President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Somerhalder:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line 1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Pelham Station in Pelham, Alabama. The Amended CAO provided updated findings and revised the Required Corrective Actions of the original CAO, dated September 16, 2016.

Item 2 of the Required Corrective Actions requires that Colonial maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the *Affected Segment* within 90-days prior to discovery. Pursuant to Item 3(b) of the Required Corrective Actions, Colonial submitted a request for temporary removal of the pressure restrictions in electronic format via email from Drew Loholff on November 17, 2016. Approval of a 90-day temporary removal of the pressure restriction was granted in a letter from OPS Southern Region, dated November 18, 2016, with a subsequent extension granted through May 31, 2017.

This letter serves as approval for temporary removal of the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions, with the approval being valid through August 29, 2017. Please note that this letter follows a May 31, 2017, email to Mr. Drew Loholff, notifying Colonial of my approval.

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

Chai, Nancy (PHMSA)

From: Urisko, James (PHMSA)
Sent: Friday, June 02, 2017 11:55 AM
To: Chai, Nancy (PHMSA)
Subject: FW: Pressure Restriction Extension - CPF 2-2016-5005H

For the compliance registry record – this is the email referenced in the June 2 extension letter

From: Urisko, James (PHMSA)
Sent: Wednesday, May 31, 2017 4:23 PM
To: Lohoff, Drew <dlohoff@colpipe.com>
Cc: Taylor, Chris (PHMSA) <Chris.Taylor@dot.gov>; Schwarzkopf, Michael (PHMSA) <Michael.Schwarzkopf@dot.gov>
Subject: Pressure Restriction Extension - CPF 2-2016-5005H

This email serves as approval for temporary removal of the pressure restrictions required by item 2 of the Amended CAO's Required Corrective Actions, with the approval being valid through August 29, 2017. A letter will be issued shortly from the Southern Region office, but this email will serve as official approval in the meantime. Please feel free to call or email with any questions.

James A Urisko, P.E.
Director, Southern Region
PHMSA Office of Pipeline Safety
(404) 832-1150
james.urisko@dot.gov

PHMSA is Hiring! Subscribe to receive new job alerts by email!

From: Urisko, James (PHMSA)
To: Choi, Nancy (PHMSA)
Subject: FW: CR-91 Pressure Restriction 02-2016-5005H
Date: Wednesday, August 30, 2017 8:12:38 AM
Attachments: image001.png

For the compliance registry – the operator's request for additional extension

---

From: Lohoff, Drew [mailto:dlohoff@colpipe.com]
Sent: Monday, August 28, 2017 12:24 PM
To: Urisko, James (PHMSA) <james.urisko@dot.gov>
Cc: Bernhardt, Jonathan <jbernhardt@colpipe.com>; Schwarzkopf, Michael (PHMSA) <Michael.Schwarzkopf@dot.gov>; Taylor, Chris (PHMSA) <Chris.Taylor@dot.gov>
Subject: CR-91 Pressure Restriction

James,

Per your letter extending the pressure extension until August 29th, Colonial requests additional time to supply the full analysis from the vendor on the MFL tool data. We anticipate supplying information on this during September so that we can close the item out prior to the quarterly status report.

Please let me know if we can have an extension through September to supply this information.

Best Regards,
Drew

III. Corrective Action 1. Removal of Pressure Restriction

A. Actions Taken During Reporting Period

1) Colonial received an extension from PHMSA, via email dated 5/31/2017 and letter dated 6/2/2017, for an extension of the temporary removal of the pressure restriction until August 29, 2017.

B. Planned Actions for next Reporting Period

1) Colonial submitted a request for removal of the pressure restriction on February 17, 2017. PHMSA indicated that it will review and respond to this request once the final ILI data analysis is submitted by Colonial.

C. Issues/Resolutions:

1) None

Drew Lohoff
Director, Compliance
Colonial Pipeline Company
Direct: (678) 762-2872
Cell: (678) 372-2063

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street NE, [illegible]
Atlanta, GA [illegible]

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 29, 2017

Mr. John Sonnerhalder
Interim President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Sonnerhalder:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to a failure on the company's hazardous liquid pipeline system. On September 9, 2016, a reportable accident occurred on Colonial's Line 1, in Shelby County, Alabama, approximately three miles from Pelham, Alabama (Failure). The Failure occurred on a section of Line 1 that runs from Collins, Mississippi, to Pelham Station in Pelham, Alabama. The Amended CAO provided updated findings and revised the Required Corrective Actions of the original CAO, dated September 16, 2016.

Item 2 of the Required Corrective Actions requires that Colonial maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the *Affected Segment* within 90-days prior to discovery. Pursuant to Item 3(b) of the Required Corrective Actions, Colonial submitted a request for temporary removal of the pressure restrictions in electronic format via email from Drew Loboff on November 17, 2016. Initial approval of a 90-day temporary removal of the pressure restriction was granted in a letter from OPS Southern Region, dated November 18, 2016, with subsequent extensions granted through August 29, 2017.

This letter serves as approval for temporary removal of the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions, with the approval being valid through September 29, 2017.

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

Chai, Nancy (PHMSA)

From: Uriako, James (PHMSA)
Sent: Friday, September 29, 2017 8:30 AM
To: Chai, Nancy (PHMSA)
Subject: FW: CPF No. 2-2016-5005H - Request for Removal of Pressure Restriction
Attachments: Request for Permanent Removal of Pressure Restriction.pdf

Operator Response for the compliance registry (and our network drive). I'll be issuing a Region response shortly...

From: Lohoff, Drew [mailto:dlohoff@colpipe.com]
Sent: Wednesday, September 27, 2017 10:11 PM
To: Uriako, James (PHMSA) <james.uriako@dot.gov>
Cc: Taylor, Chris (PHMSA) <Chris.Taylor@dot.gov>; Schwarzkopf, Michael (PHMSA) <Michael.Schwarzkopf@dot.gov>; Piazza, Mark <mpiazza@colpipe.com>; Bernhardt, Jonathan <jbernhardt@colpipe.com>
Subject: CPF No. 2-2016-5005H - Request for Removal of Pressure Restriction

James,

Attached is a letter requesting removal of the pressure restriction following the CR-91 incident. The current pressure restriction extension is granted until this Friday, September 29, 2017 per our August 28 e-mail exchange.

Should you have any questions regarding the final IU data and Colonial's follow-up, please contact Jon Bernhardt, Mark Piazza or me; any of us are more than willing to discuss further.

Best Regards,
Drew

Drew Lohoff
Director, Government Affairs and Counsel
Colonial Pipeline Company
Direct: (678) 762-2872
Cell: (678) 372-2063

D. A. Lohoff
Director, Government Affairs and Counsel

Phone: (678) 762-2872
Cell: (678) 372-2063
e-mail: dlohoff@colpipe.com

September 27, 2017

VIA E-MAIL

Mr. James Urisko
Regional Director, Southern Region
Pipeline and Hazardous Materials Safety Administration
233 Peachtree St. NE, Suite 600
Atlanta, GA 30303

Re: CPF No. 2-2016-5005H – Removal of Pressure Restriction and Status of ILI Data

Dear Mr. Urisko:

On October 13, 2016, PHMSA issued an Amended Corrective Action Order (ACAO) to Colonial Pipeline Company (Colonial) in response to the failure of Line 1 that occurred on September 9, 2016 in Shelby County, AL. Under the "Required Corrective Actions" of the ACAO, Section 2 required "a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the *Affected Segment*[1] within the 90-days prior to discovery" following the removal of the Line 1 Bypass[2]. Section 3(a) of the ACAO provides that Colonial may request a removal of the pressure restriction when "a reliable engineering analysis demonstrates that the pressure increase is safe, taking into consideration all known defects, anomalies, completion of the Repair Plan, and the operating parameters of the *Affected Segment*". Pursuant to the terms of Section 3(a) of the ACAO, Colonial now requests full removal of the pressure restriction.

In prior communications with PHMSA, a temporary removal of the pressure restriction was approved, but a permanent removal of the pressure restriction was deferred. This was deferred until Colonial completed a successful in-line inspection (ILI) of Line 1 in the Affected Segment and completed data analysis of features identified by the ILI tool to determine whether any defects existed on Line 1 that required immediate response. Colonial recently completed analysis of the ILI data from an April 2015 combination MFL/caliper ILI tool run and integration of that data with existing integrity management data, and has developed a list of anomalies for excavation. The anomalies selected for excavation are described below and summarized in the table that follows the descriptions.

Regulatory Dips

Eight (8) Category 2B anomalies – these are all bottom-side dents with metal loss indications within the dent profile. These anomalies are a 60-day schedule condition. Two (2) of the 60-day anomalies

[1] The ACAO defines the *Affected Segment* as the segment of "Line 1 running from Collins, Mississippi, to Colonial's Pelham Station in Pelham, Alabama."
[2] The Line 1 Bypass was a temporary pipeline constructed to bypass the section of Line 1 where the failure occurred while repair to restore the line to standard operation was being conducted.

are located in Mississippi, and six (6) are located in Alabama. Two (2) of these locations have been previously identified and are included on the DRIPM list but have not been completed at the time the current dig list was issued. All of these dents are 2% and less in depth and did not previously show indications of metal loss which has now been reported.

- 7 of the 8 are less than 2%
- 1 is reported at 2% (located in AL).

33 Category 3D anomalies – these are corrosion anomalies that are greater than 50% wall loss (with 10% tool tolerance added). All but four (4) of the anomalies are located in Alabama.

Colonial Voluntary Digs

64 Category 4D anomalies – these are identified as needing excavation based on the presence of shallow dents (i.e., <2%) and metal loss indications. Most of the anomalies (55) are in Alabama.

19 category 4B anomalies – these anomalies are metal loss indications that are less than 50% in depth but present at or near a foreign line crossing (seven (7) total) and dents (12 total) that are present at/near a foreign line crossing.

Anomaly Category	Basis for Excavation	Operating Area			Total # Excavations
		352	353	401	
2B	Dent w/ML	1	1	6	8
3D	Metal Loss	2	2	29	33
	Metal Loss	7	5	23	35
	Dent w/ML	5	2	42	49
	Metal Loss	0	1	6	7
	Dent	4	2	6	12
	Total	**19**	**13**	**112**	**144**

As indicated above, only 41 of the anomalies meet the regulatory requirements for anomaly response (per 49 CFR 195.452(h)), with Colonial excavating 103 anomalies based on its own internal ILI response criteria. The anomalies placed on the Line 01 Collins to Pelham combo ILI tool run dig list are consistent with Colonial's past practice of taking a pro-active approach for our IMP and excavating anomalies where changes in the data suggest that evaluation of the conditions is warranted, even if outside of the specific PHMSA-defined response conditions.

Based on Colonial's review of the data and discussions with our ILI analysts, none of the anomalies identified represents an immediate threat to the integrity of the Line 01 Collins to Pelham piggable segment and therefore there should not impact continuing to operate the line under standard operating conditions and that there is no need for a pressure restriction related to remediation/repair of these anomalies.

For the above reasons, Colonial believes it has adequately addressed the failure mode presented by the CR-91 incident, as set forth in the Root Cause Failure Analysis, and has completed "a

reliable engineering analysis demonstrates that the pressure increase is safe, taking into consideration all known defects, anomalies, completion of the Repair Plan, and the operating parameters of the *Affected Segment*. Accordingly, Colonial respectfully requests that PHMSA approve the removal of the pressure restriction on the Affected Segment, consistent with the terms of Item 3(a) of the ACAO.

Sincerely,

Drew Lohoff

Chai, Nancy (PHMSA)

From: Uriske, James (PHMSA)
Sent: Friday, September 29, 2017 9:41 AM
To: Chai, Nancy (PHMSA)
Subject: FW: CPF No. 2-2016-5005H - Request for Removal of Pressure Restriction

Region response to Colonial's recent request.

From: Uriske, James (PHMSA)
Sent: Friday, September 29, 2017 9:40 AM
To: 'Loholf, Drew' <dloholf@colpipe.com>
Cc: Taylor, Chris (PHMSA) <Chris.Taylor@dot.gov>; Schwarzkopf, Michael (PHMSA) <Michael.Schwarzkopf@dot.gov>; Piazza, Mark <mpiazza@colpipe.com>; Bernhardt, Jonathan <jbernhardt@colpipe.com>
Subject: RE: CPF No. 2-2016-5005H - Request for Removal of Pressure Restriction

Thanks for the email, Drew. The Region will provide an official response to your request no later than October 6, 2017. In the meantime, please let this email serve as an extension for the approval of the temporary removal of the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions through that date (October 6, 2017). Thanks, and let me know if you have any questions.

From: Loholf, Drew [mailto:dloholf@colpipe.com]
Sent: Wednesday, September 27, 2017 10:11 PM
To: Uriske, James (PHMSA) <james.uriske@dot.gov>
Cc: Taylor, Chris (PHMSA) <Chris.Taylor@dot.gov>; Schwarzkopf, Michael (PHMSA) <Michael.Schwarzkopf@dot.gov>; Piazza, Mark <mpiazza@colpipe.com>; Bernhardt, Jonathan <jbernhardt@colpipe.com>
Subject: CPF No. 2-2016-5005H - Request for Removal of Pressure Restriction

James,

Attached is a letter requesting removal of the pressure restriction following the CR-91 incident. The current pressure restriction extension is granted until this Friday, September 30, 2017 per our August 28 e-mail exchange.

Should you have any questions regarding the final ILI data and Colonial's follow-up, please contact Jon Bernhardt, Mark Piazza or me; any of us are more than willing to discuss further.

Best Regards,
Drew

Drew Loholt
Director, Government Affairs and Counsel
Colonial Pipeline Company
Direct: (678) 762-2872
Cell: (678) 372-2063

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street NE, Suite 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 6, 2017

Mr. Joseph A. Blount, Jr.
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Blount:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to the September 9, 2016, Line 01 failure in Shelby County, Alabama, approximately three miles from Pelham, Alabama. The Amended CAO provided updated findings and revised the *Required Corrective Actions* of the original CAO, dated September 16, 2016.

Item 2 of the Required Corrective Actions requires that Colonial maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the Affected Segment within 90-days prior to discovery. Pursuant to Item 3(b) of the Required Corrective Actions, Colonial submitted a request for temporary removal of the pressure restrictions in electronic format via email from Drew Loloff on November 17, 2016. Initial approval of a 90-day temporary removal of the pressure restriction was granted in a letter from OPS Southern Region, dated November 18, 2016, with subsequent extensions granted through October 6, 2017. In a letter dated September 27, 2017 (delivered via e-mail from Mr. Loloff), Colonial requested permanent removal of the pressure restriction.

In its most recent Quarterly Report (for the period ending June 30, 2017; received by PHMSA via e-mail on July 14, 2017), Colonial states that the protocols for its Wrinkle Susceptibility Evaluation are expected to be finalized during the "next quarterly period." Based on this ongoing effort and its relation to the CR-91 failure mechanism, I am approving a temporary removal of the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions, with the approval being valid through March 31, 2018.

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street NE, 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 30, 2018

Mr. Joseph A. Blount, Jr.
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 3-2016-5005H

Dear Mr. Blount:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to the September 9, 2016, Line 01 failure in Shelby County, Alabama, approximately three miles from Pelham, Alabama. The Amended CAO provided updated findings and revised the *Required Corrective Actions* of the original CAO, dated September 16, 2016.

Item 2 of the Required Corrective Actions requires that Colonial maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the Affected Segment within 90-days prior to discovery. Pursuant to Item 3(b) of the Required Corrective Actions, Colonial submitted a request for temporary removal of the pressure restrictions in electronic format via email from Drew Loloff on November 17, 2016. Initial approval of a 90-day temporary removal of the pressure restriction was granted in a letter from OPS Southern Region, dated November 18, 2016, with subsequent extensions granted through March 31, 2018. In a letter dated March 29, 2018 (delivered via e-mail from Mr. Loloff), Colonial requested permanent removal of the pressure restriction.

Mr. Loloff's March 29, 2018, submittal indicates that the outstanding actions related to Colonial's Wrinkle Susceptibility Evaluation (WSE) have been completed, including finalization of the WSE protocols and the related Finite Element Analysis. The results of the WSE, however, have yet to be submitted for PHMSA's review. Based on the anticipated submittal of the WSE protocols and results summary in the upcoming quarterly report, and the need for adequate time for PHMSA's review, I am approving a temporary removal of the pressure restrictions required by Item 2 of the Amended CAO's Required Corrective Actions, with the approval being valid through June 1, 2018.

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street NE, 900
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 1, 2018

Mr. Joseph A. Blount, Jr.
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Blount:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to the September 9, 2016, Line 01 failure in Shelby County, Alabama, approximately three miles from Pelham, Alabama. The Amended CAO provided updated findings and revised the *Required Corrective Actions* of the original CAO, dated September 16, 2016.

Item 2 of the Required Corrective Actions requires that Colonial maintain a twenty percent (20%) pressure reduction from the highest steady state pressures recorded throughout the Affected Segment along Line 01 within 90 days prior to discovery. Pursuant to Item 3(b) of the Required Corrective Actions, Colonial submitted a request for temporary removal of the pressure restrictions in electronic format via email from Drew Loboff on November 17, 2016. Initial approval of a 90-day temporary removal of the pressure restriction was granted in a letter from OPS Southern Region, dated November 18, 2016, with subsequent extensions granted through June 1, 2018.

Based on PHMSA's review of Colonial's Wrinkle Susceptibility Evaluation protocols and the related Finite Element Analysis, received by PHMSA May 21, 2018, I approve the removal of the pressure restriction imposed by Item 2 of the Required Corrective Actions. The pipeline system may be returned to its pre-failure maximum operating pressure (MOP).

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste. 600
Atlanta, GA 30303

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 19, 2019

Mr. Joseph A. Blount, Jr.
President & Chief Executive Officer
Colonial Pipeline Company
1185 Sanctuary Parkway, Suite 100
Alpharetta, GA 30009-4765

Re: CPF No. 2-2016-5005H

Dear Mr. Blount:

On October 13, 2016, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), issued an Amended Corrective Action Order (CAO) to Colonial Pipeline Company (Colonial), relating to the September 9, 2016, Line 01 failure (Failure) in Shelby County, Alabama, approximately three miles from Pelham, Alabama. The Amended CAO provided updated findings and revised the *Required Corrective Actions* of the original CAO, dated September 16, 2016.

Item 5 of the Required Corrective Actions requires that Colonial develop and submit for approval a written Remedial Work Plan (RWP) that includes corrective measures, fully addressing all known or suspected factors that caused or contributed to the Failure. Item 5 of the Required Corrective Actions further specified required elements of the RWP. Colonial initially submitted the RWP on March 31, 2017. Following PHMSA's review, Colonial submitted additional supporting information and annexes in electronic format via email from Mark Piazza on May 21, 2018.

Based on PHMSA's review of the submitted RWP and supporting information, I approve the RWP as required by Item 5 of the Required Corrective Actions.

If you have any questions concerning this letter or any other matter regarding the Amended CAO, please feel free to contact me at 404-832-1150.

Sincerely,

James A. Urisko
Director, Office of Pipeline Safety
PHMSA Southern Region

DNV·GL

Final Report

Technical Root Cause Failure Analysis of CR-91 Incident – September 9, 2016

Colonial Pipeline Company
Alpharetta, Georgia

Report No.: OAPUS307BPADG (PP164617)
January 27, 2017

Project Name:	Technical Root Cause Failure Analysis of CR-91 Incident – September 9, 2016
Customer:	Colonial Pipeline Company
Contact Person:	Drew Lohoff
Date of Issue:	January 27, 2017
Project No.:	PP164617
Organization Unit:	Incident Investigation
Report No.:	OAPUS3078PADG

DET NORSKE VERITAS (U.S.A.), INC. (DNV GL)
Oil & Gas
Materials & Corrosion Technology Center
Incident Investigation
5777 Frantz Road
Dublin, OH 43017-1886
United States
Tel: (614) 761-1214
Fax: (614) 761-1633
www.dnvgl.com

Task and Objective:

Please see Executive Summary.

Prepared by	Verified by	Approved by
Barbara N. Padgett, Ph.D. Senior Engineer	John A. Beavers, Ph.D., FNACE Senior Principal Engineer	David H. Norfleet, Ph.D., P.E. Head of Section – Incident Investigation
John Godfrey Principal Consultant	Oliver C. Moghissi, Ph.D., FNACE Technology Manager, DNV GL Americas, Oil and Gas	
David Kemp Project Engineer		

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Executive Summary

Colonial Pipeline Company (Colonial) retained Det Norske Veritas (U.S.A.), Inc. (DNV GL) to perform a root cause failure analysis (RCFA) on a 36-inch nominal diameter transmission pipeline (Line 01) that experienced an in-service leak. This incident will herein be referred to as the County Road 91 (CR-91) Incident. CR-91 is located in Shelby County, Alabama near the site of the in-service leak. Line 01 transports gasoline approximately 1,050 miles from Houston, Texas, to Greensboro, North Carolina. The pipeline system at this location is owned and operated by Colonial and consists of two (2) parallel pipelines (Line 01 and Line 02). Line 02 is used for the transportation of distillates. The leak on Line 01 was estimated to be 7,370 barrels by Colonial.

The leak was discovered on September 9, 2016 within Joint 266950 at Station 5155+57 (later clarified in the field as 5155+04), approximately 9 miles upstream (U/S) of Colonial's Pelham Junction tank farm in Alabama. The portion of the pipeline that failed is comprised of 36-inch diameter by 0.281-inch nominal wall thickness, API 5L Grade X52 steel line pipe that was manufactured by National Tube Company (National Tube) and contains a double submerged arc welded (DSAW) longitudinal seam. The pipeline was completed in 1963 and was externally coated with a mill-applied asphalt enamel coating. The coating at the failure location was replaced in 2015 with a field-applied Scotchkote™ 323 epoxy coating by 3M™. The pipeline has an impressed current cathodic protection (CP) system.

The objectives of the RCFA, according to Section 7 of the amended corrective action order (ACAO) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) to Colonial on October 13, 2016, are to "*document the decision-making process and all factors contributing to the failure including, but not limited to, manufacturing defects, operational or maintenance errors, and natural disasters.*" Also, the "*final report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.*"

The RCFA focused on the segment of Line 01 between Station 5144+82 and Station 5175+17, which contained the failure location (herein referred to as the Stopple Segment). The conclusions and recommendations for this RCFA are based on the findings from a metallurgical investigation of the failure location performed by a third party, supplemental analyses performed by DNV GL, as well as information obtained from Colonial. The information obtained from Colonial and other resources is referenced in Appendix A.

A root cause(s) is (are) defined by PHMSA as "*the basic, underlying causal factor[s] in an accident or other event scenario which if removed would have prevented the accident or event from occurring.*" ***The technical root cause (causal factor) of the CR-91 Incident***

was inadequate soil consolidation under Line 01 following maintenance / recoating activities in 2015.

DNV GL performed a causal analysis using the Barrier-based Systematic Causal Analysis Technique (BSCAT™) methodology for the RCFA. This analysis identified the preventative barriers that were in place at the time of the CR-91 Incident. By evaluating these barriers and relevant information related to the incident, the technical root cause and lessons learned were determined. Further discussion of the barriers and lessons learned are included in Sections 6.0 and 7.0, respectively.

Barrier 1: *Application of maintenance activities and practices to ensure the pipe remains at its original state.*

Barrier 2: *Identification of changing ROW and external loading conditions, natural and manmade.*

Barrier 3: *Identification of anomalies, inclusive of pipe deformation, using ILI.*

The RCFA identified improvements (lessons learned) that could be made to the pipeline monitoring and maintenance programs, inclusive of the integrity management program:

- Development of a program that identifies locations similar to the failure location for the CR-91 Incident (i.e. recoating projects on a hillside with installed field bends) for evaluation to the susceptibility of buckling. Assuming similar backfill and compaction practices were utilized throughout the 2015 recoating effort, the presence of field bends increases the risk of bending moments due to soil consolidation. The hillside may have contributed to soil desiccation and the presence of increased external loads.
- Consideration to revising procedures related to backfill and excavation to provide further guidance is recommended. Specific recommendations include:
  - Compaction requirements for the length of excavations should be specified. Consideration should be given to the diameter to wall thickness (D/t) ratio, soil types, the type of compaction equipment required, and post compaction testing. As necessary, an engineering evaluation and site specific support and compaction planning should be conducted to address pipeline features such as overburden, field bends, fittings, repair sleeves, etc.
  - Clarification of the pipeline support requirements and methods to ensure settlement does not occur during support placement and removal.
- Continued consideration to long-term soil consolidation or settlement and its impact following major maintenance is recommended.
- Continued consideration of the impact of drought conditions when addressing the threat of natural disasters during risk assessments is recommended.

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Acronyms and Definitions

Term	Definition
ACAO	Amended Corrective Action Order
AFE	Authority for Expenditure
AOR	Aerial Observation Report
BMT	BMT Fleet Technology Limited
BSCAT™	Barrier-based Systematic Causal Analysis Technique
Buckling	A compression and torsion phenomenon that occurs after some critical load.[1] It is the partial collapse of the pipe wall causing the pipe to flatten or to become more oval.[2]
CAO	Corrective Action Order
CDT	Central Daylight Time
CIS	Close Interval Survey
CL	Symbol for inorganic, fine-grained soils with a liquid limit greater than 50 and a plasticity index greater than 7. These soils are grouped as "Lean clay" per the USCS.
Colonial	Colonial Pipeline Company
CP	Cathodic Protection
CR-91	County Road 91, which is located in Shelby County, Alabama
DNV GL	Det Norske Veritas (U.S.A.), Inc.
DOC	Depth of Cover
DSAW	Double Submerged Arc Welded
D/S	Downstream
Drummond	Drummond Company, Inc.
Failure site	Excavated portion of the pipeline
Failure location	Location where leak was identified
FE	Finite Element
FEA	Finite Element Analysis
GC	Symbol for coarse-grained soils that contain more than 50% gravel, less than 5% fines, a coefficient of uniformity (Cu) $\geq$ 4, and a coefficient of curvature (Cc) between 1 and 3, inclusively. These soils are grouped as "Clayey gravel" per the USCS.

1 *ASM Handbook, Failure Analysis and Prevention, Volume 11* (2002).
2 http://www.phmsa.dot.gov/staticfiles/PHMSA/Pipeline/TQGlossary/Glossary.html

Acronyms and Definitions (continued)

Term	Definition
GW	Girth weld
ILI	In-line Inspection
LL	Liquid limit; "water content above which soil behaves as a liquid rather than a solid"[3]
LPF	Load proportionality factor
MFL	Magnetic flux leakage
MOP	Maximum operating pressure
MPI	Magnetic particle inspection
MTR	Material test report
National Tube	National Tube Company
NCEI	National Center for Environmental Information
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
PHMSA	Pipeline and Hazardous Materials Safety Administration
PI	Plasticity index
PL	Plastic limit; "water content below which the soil loses its plasticity or cohesiveness"
RGGS	RGGS Land & Minerals LLP
ROW	Right of way
SAGA	SAGA Petroleum
SC	Symbol for coarse-grained soils that contain more than 50% sand and more than 12% fines, which are characterized as lean clay or fat clay. These soils are grouped as "Clayey sand" per the USCS.
SCC	Stress corrosion cracking
SC-SM	Symbol for coarse-grained soils that contain more than 50% sand and more than 12% fines per the USCS. The "SC" or clayey sand group contains lean clay or fat clay fines. The "SM" or silty sand soils group contains silt or elastic silt fines.
SIPM	System Integrity Program Management
SMYS	Specified minimum yield strength

3 James M. Oswell, *Soil mechanics and Pipeline Stress Analysis* (2016).

Acronyms and Definitions (continued)

Term	Definition
Stopple Segment	Segment of Line 01, between the U/S (Station 5144+82) and D/S (Station 5175+17) stopple locations, that contained the failure location. Note this is a portion of the Affected Segment in PHMSA's ACAO. The Affected Segment, as defined by PHMSA, is the "*segment of Line #1 that runs from Collins, Mississippi, to Respondent's Pelham Station, in Pelham, Alabama*" where the failure occurred.
TOR	Thread-O-Ring fitting
TS	Test station
U/S	Upstream
USCS	Unified Soil Classification System (ASTM D2487)
VCLT	Valley Creek Land & Timber
Wrinkle	A geometric feature that forms when excessive bending or curvature is applied to a pipe.[4]

4 http://www.pipelineawareness.org/residents-businesses/glossary/

1.0 BACKGROUND

Colonial Pipeline Company (Colonial) retained Det Norske Veritas (U.S.A.), Inc. (DNV GL) to perform a root cause failure analysis (RCFA) on a 36-inch nominal diameter transmission pipeline (Line 01) that experienced an in-service leak. This incident will herein be referred to as the County Road 91 (CR-91) Incident. CR-91 is located in Shelby County, Alabama near the site of the in-service leak. Line 01 transports gasoline approximately 1,050 miles from Houston, Texas, to Greensboro, North Carolina. The pipeline system at this location is owned and operated by Colonial and consists of two (2) parallel pipelines (Line 01 and Line 02). Line 02 is used for the transportation of distillates. The leak on Line 01 was estimated to be 7,370 barrels by Colonial [Ref 7].

The leak was discovered on September 9, 2016, within Joint 266950 at Station 5155+57 (later clarified in the field as 5155+04[5]), approximately 9 miles upstream (U/S) of Colonial's Pelham Junction tank farm in Alabama [Ref 1]. Figure 1 contains photographs of the failure site showing the excavated portion of Line 01, the Line 01 bypass installed during the leak response, and the failure location. As shown in the figure, the leak occurred near the bottom of a hill on property currently owned by Valley Creek Land & Timber (VCLT). Mining, drilling, and logging operations had historically occurred near the failure location. The map in Figure 2 shows the locations of sediment retention ponds, well pads, logging activity, and mining activity on the property. VCLT purchased the property from US Steel Corp on September 8, 2014. [6] At that time a company called RGGS Land & Minerals LLP (RGGS) controlled the mineral rights on the property.[6] RGGS had subleased the coal and iron ore rights on the Twin Pines mine[7] to Drummond Company, Inc. (Drummond) and the methane gas lease SAGA Petroleum (SAGA).[6]

The portion of the pipeline that failed is comprised of 36-inch diameter by 0.281-inch nominal wall thickness, API 5L Grade X52 steel line pipe that was manufactured by National Tube Company (National Tube) and contains a double submerged arc welded (DSAW) longitudinal seam [Ref 12]. The pipeline was completed in 1963 and was externally coated with a mill-applied asphalt enamel coating [Ref 12]. The coating at the failure location was replaced in 2015 with a field-applied Scotchkote™ 323 epoxy coating by 3M™ [Ref 5]. The pipeline has an impressed current cathodic protection (CP) system [Ref 31].

The maximum operating pressure (MOP) of the line is 584 psig [Ref 12], which corresponds to 71.9% of the specified minimum yield strength (SMYS) of the line pipe at the failure

5 Station numbers for the leak site and adjacent features were calculated by DNV GL based on ILI logs, survey data, and alignment sheets provided by Colonial.
6 Background information provided by Colonial.
7 "Twin Pines mine" refers to the property located immediately south of the ROW near the failure location.

location. The calculated pressure at the time and location that the leak was discovered was 311 psig [Ref 9], which corresponds to 38.3% of SMYS.

The objectives of the RCFA, per Section 7 of the amended corrective action order (ACAO) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) to Colonial on October 13, 2016, are to "*document the decision-making process and all factors contributing to the failure including, but not limited to, manufacturing defects, operational or maintenance errors, and natural disasters.*" Also, the "*final report must include findings and any lessons learned whether the findings and any lessons learned are applicable to other locations within Colonial's pipeline system, and actions Colonial is taking for those other locations where the lessons learned are applicable.*" [Ref 1]

The RCFA focused on the segment of Line 01 between Station 5144+82 and Station 5175+17, which contained the failure location [Ref 42] (herein referred to as the Stopple Segment). The conclusions and recommendations for this RCFA are based on the findings from a metallurgical investigation of the failure location performed by a third party, supplemental analyses performed by DNV GL, as well as information obtained from Colonial. The information obtained from Colonial and other resources is referenced in Appendix A.

DNV GL reserves the right to modify or supplement the results presented herein should new information and / or findings become available.

2.0 TECHNICAL APPROACH

2.1 Barrier-based Systematic Causal Analysis Technique Methodology

Causal analysis is the core of any incident analysis. The analysis uses a systematic method of processing evidence gathered during an investigation to identify the factors that led to the incident. The analysis starts with the incident and works backwards toward the "root cause(s)." This approach assists in the development of corrective and / or remedial measures.

DNV GL used the Barrier-based Systematic Causal Analysis Technique (BSCAT™) to investigate the CR-91 Incident. BSCAT™ is a methodology that allows for the analysis of complex incidents through the examination of barriers to the incident. A simplified BowTie diagram is often used in BSCAT™ to identify barriers that are in place to prevent the threat (i.e. the immediate / metallurgical cause of the leak) that led directly to the incident and the barriers that are in place to mitigate consequences following an incident. For this investigation, only the preventative barriers to the threat that directly led to the incident are considered. Once barriers are identified, BSCAT™ applies a systematic causal analysis to

each barrier to assess the effectiveness of the individual barriers. Using the barriers identified, (a) root cause(s) to the incident is (are) determined.

The BSCAT™ process involves the following steps:

1. **Evidence Capture** – This includes collecting information pertaining to the incident through interviews of the people involved, photographs of the failure site, and review of documents and data related to the incident.

2. **Timeline Development** – The evidence captured is used to create a timeline of the events leading up to and following the incident. Timelines developed for the CR-91 Incident are provided in Section 4.0.

3. **Barrier Identification** – A BowTie diagram of the incident is created using the threat (i.e. immediate cause of the incident) that led to the incident. The barriers or controls that were or were not in place to prevent the incident are identified.

4. **Barrier State** – The state of each barrier is determined. The barrier status descriptions include Effective, Insufficient, Failed, and Missing. The term "Effective" is used to describe a barrier that is performing in the manner as originally intended. "Insufficient" is a term used to describe a barrier that is in place and operating, but its performance is unsatisfactory.[8] The term "Failed" is used to describe a barrier that was originally in place, but has degraded and no longer functions as originally intended. "Missing" is used to describe a barrier that was either never in place or in place at one time, but was removed or became obsolete. Supplement analyses, such as modeling, may be performed to determine the state of a given barrier. Supplemental analyses performed by DNV GL for the CR-91 Incident are provided in Section 5.0.

5. **Causal Analysis** – The Insufficient, Failed, or Missing barriers are then evaluated to identify specific conditions or situations that degrade the barrier and / or reduce its effectiveness. These conditions or actions are referred to as contributing factors. As with threats, barriers exist that help to control or manage contributing factors. Barriers evaluated for the CR-91 Incident are summarized in Section 6.0.

2.2 Activities Executed for Root Cause Failure Analysis

The following steps were performed as part of the RCFA. Two DNV GL personnel were present on-site between September 29 and October 1, 2016, to witness the final excavation

8 An insufficient barrier may be performing as originally intended; however, conditions may have changed such that the original function is no longer sufficient.

and removal of the failed pipe section. The as-found condition of the pipe and the surrounding area were documented with photographs, and measurements of the pipe defect and removed pipe section were taken. The same DNV GL personnel as well as Colonial personnel and others conducted interviews of Colonial staff and contractors between November 14 and November 16, 2016, to aid in the evidence capture and timeline creation steps of the investigation.

Additionally, DNV GL performed supplemental analyses and reviewed various materials obtained from Colonial (i.e. technical documents, manuals, maps, and data). The materials are grouped into the following categories:

- Incident Related Documents: 1 – 9
- Historical Records: 10
- Metallurgical Investigation Documents: 11 – 17
- Integrity Related Documents: 18 – 30
- Cathodic Protection Records: 31
- Leak Detection Documents: 32
- Control Center Documents: 33 – 37
- Design and Construction Related Documents: 38 – 40
- Bypass and Replacement Plan Documentation: 41 – 44
- Geotechnical Assessment Records: 45 – 48

A complete list of the materials reviewed for the RCFA is provided in Appendix A.

The documents listed above were used for the following tasks:

- Immediate cause determination for the leak
- Timeline creation of events leading up to the leak
- Technical root cause(s) determination for the leak

It is important to note that the analyses described in this report were only performed for the Stopple Segment. The findings and discussion presented in this report are not necessarily representative or indicative of all pipeline systems and programs owned or operated by Colonial.

3.0 IMMEDIATE / METALLURGICAL CAUSE

BMT Fleet Technology Limited (BMT) performed a metallurgical analysis on the cutout section of pipe that included the failure location to determine the immediate cause of the leak. The draft metallurgical report was issued to Colonial and PHMSA on November 10, 2016 [Ref 11]. Figure 3 is a photograph of the pipe section containing the wrinkle[9] that was sent to BMT for the immediate cause analysis [Ref 16]. The wrinkle was located 2.4 feet downstream (D/S) of GW 266950 at the top of the pipe between, approximately, the 9:00 and 3:00 orientations.

The results of BMT's analysis indicate that the leak occurred at a crack that formed at a wrinkle. The wrinkle was located between approximately the 9:00 and 3:00 orientations, on a segment of the pipeline that was recoated in 2015 (approximately 100 feet in length). Cracks in the coating indicate that the wrinkle occurred after the recoating. Multiple external surface-breaking cracks were present at the wrinkle, mainly oriented in the circumferential direction (close to 90° relative to the pipe axis). The crack that leaked was located near the 12:00 orientation, at the peak of the wrinkle, and was mainly oriented in the circumferential direction, although it did extend axially on either side of the wrinkle. The angled morphology of the cracks on the external pipe surface, as well as the angled morphology (oriented at approximately 45° angle) below / adjacent to the external pipe surface, are typical of cracks that form at wrinkles.

Examination of the fracture surfaces from the failure location revealed the presence of "*ductile tear ridges and flat fracture facets resembling quasi-cleavage type facets* [Ref 11]." There was no clear evidence of fatigue crack growth on the fracture surface.

Chemical and mechanical testing was performed on samples taken from the cutout section of pipe that was removed from Line 01 and sent to BMT for analysis. The results of those tests revealed that the steel meets the requirements of API 5LX for the vintage and grade of steel as reported by BMT. No evidence of any metallurgical defects that may have played a role in the leak was identified.

Based on the metallurgical evidence presented by BMT, the immediate cause of the leak was a circumferential crack in a wrinkle that formed in the pipe body due to buckling[10]. Also, based on the metallurgical evidence, BMT stated that "*[t]he fracture appeared to be due to multiple loading events rather than a single event ...*" [Ref 11].

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9 Wrinkle: A geometric feature that forms when excessive bending or curvature is applied to a pipe.[4]

10 Buckling: A compression and torsion phenomenon that occurs after some critical load.[1] It is the partial collapse of the pipe wall causing the pipe to flatten or to become more oval.[2]

4.0 TIMELINE OF EVENTS

Timelines were developed to help visualize and to identify the action / events that occurred leading up to the leak on September 9, 2016, as well as subsequent activities performed after the leak by Colonial and its contractors. Three timelines are presented below: (1) a historical timeline, (2) an incident timeline, and (3) a timeline of third party activities. The historical timeline incorporates key events that occurred on the Stopple Segment, unless otherwise noted, between the time of construction and the date of the leak. The incident timeline incorporates key events associated with shutting down the Stopple Segment, cut-out and removal of the failure location, and supplemental analyses performed by Colonial or its contractors. The timeline of third party activities incorporates key activities associated with drilling, mining, and logging that took place near the failure location.

4.1 Historical Timeline

Figure 4 is the historical timeline showing key events for Line 01 beginning with the start of construction in August of 1962. The timeline includes the following dates:

(1) Original construction activities (light blue triangles and brackets),

(2) CIS surveys (dark gray Xs and brackets),

(3) Integrity-related assessments (orange triangles),

(4) Maintenance activities (light green triangle),

(5) Operations activities (dark blue circles),

(6) Dates for the incident (red diamond),

(7) The last rectifier survey (dark gray X), and

(8) The last aerial patrol (green line) are also shown.

4.1.1 Construction Activities

The construction of Line 01 was performed under Authority for Expenditure (AFE) 1 between late 1962 and early 1963 and the construction of Line 02 was performed in 1971 under AFE 1666 [Ref 6]. Line 02 is located 33 feet to the south of Line 01 in the vicinity of the Stopple Segment. Original construction activities for the Stopple Segment started with procurement and manufacture of the line pipe. Colonial contracted with National Tube to manufacture the line pipe, placing the order on June 14, 1962 [Ref 38]. Pipe joints with varying wall thicknesses and steel grades were ordered for Line 01. As previously mentioned, the Stopple Segment is comprised of API 5L, Grade X52 line pipe steel with a

0.281-inch nominal wall thickness. A review of the material test reports (MTRs) from the original construction documents was performed by DNV GL [Ref 38]. The results of the mechanical and chemical testing in the MTRs was consistent with the results of the analyses performed by BMT.

Installation of Line 01 was performed between August 14, 1962, and July 21, 1963, and the line pipe was laid, coated, and tested by Rivers Construction Corporation (Alabama Highway 69 to Alabama Highway 77) and Williams Brothers (Mississippi-Alabama State Line to Alabama State Highway 69) [Ref 40]. These dates indicate that Rivers Construction Corporation performed the line pipe installation and construction for the Stopple Segment. Original construction survey records indicate that the section of pipe containing the failure location was installed in a rock ditch [Ref 5]. Original construction specifications required a minimum depth of cover (DOC) of 20 inches and a minimum width of 60 inches for rock ditch [Ref 40]. Backfill specifications stated a minimum of 6 inches of soft earth padding completely around the pipe prior to backfill with rocks or other hard objects [Ref 40]. Survey data from original construction [Ref 40] and information from the recoating project in 2015[11] indicated that the pipeline was padded in this manner. During the recoating project, additional rock was excavated beneath the pipeline to accommodate the recoating efforts [11], and soft earth padding was placed under the pipeline in the recoated area.[11]

The section of pipe excavated at the failure site contained two overbends, located approximately 32.3 feet U/S and 30.2 feet D/S of the failure location. ILI logs quantify the U/S bend as 52.2D[12], 3.6 degrees down, and 131.14 feet in length; and the D/S bend as 43.7D, 3.3 degrees down, and 92.99 feet in length [Ref 23]. These bends meet original construction specifications that called for maximum field bends of 1.5 degrees per pipe diameter with minimum straight tangents of 6 feet [Ref 40]. Overbends were specified to have 12 inches of clearance between the inside of the bend and the bottom of the ditch [Ref 40]. Earth bag breakers were installed at the direction of company personnel during original construction to prevent erosion of the ditch line [Ref 40]. Original construction survey records indicate one such breaker was installed at Station 5154+37, near the failure location [Ref 40].

4.1.2 Cathodic Protection

Cathodic protection (CP) in the form of an impressed current system was completed in 1963 and was applied after the original construction of Line 01 [Ref 40]. Within ten calendar years of the incident, six close interval surveys (CIS) were performed on the Stopple

11 Based on information provided by Colonial.
12 Note that 52.2D indicates that 52.2 X the diameter of pipe = the radius of curvature of the bend.

Segment: (1) CIS1 in April 2006; (2) CIS2 on June 7, 2010; (3) CIS3 in September 2010; (4) CIS4 on September 18, 2014; (5) CIS5 in June of 2015, and (6) CIS6 on July 27, 2015 [Ref 3, 6, 18, 31]. The time between surveys did not exceed 4.4 years. The criterion for the ON potential readings was reported as -0.850 V versus a copper-copper sulfate electrode [Ref 31]. Findings from CIS4 and CIS5, which were prove-up surveys following line recoating, were provided for review. CIS4 and CIS5 were performed from Station 5152+75 to Station 5154+30 and from Station 5152+77 to Station 5154+28, respectively. The ON potentials for CIS4 were between -1.1 V and -1.6 V and the ON potentials for CIS5 were between -1.142 V and -1.547 V [Ref 31]. The off potentials for CIS4 and CIS5 were not recorded.

A linear anode system was installed at various locations adjacent to Lines 01 and 02 prior to September 6, 2014, which is the date the linear anodes are first noted in the provided alignment sheets [Ref 20]. The exact timing of the linear anode installation was not provided. The nearest linear anode to the leak site is located D/S of the failure location, beginning at Station 5166+50. There was no linear anode in the immediate vicinity of the failure location.

The two closest rectifiers to the failure location were at Station 4958+62 (U/S Rectifier) and 5199+27 (D/S Rectifier); refer to Figure 5 for rectifier locations. Rectifier surveys generally took place monthly [Ref 31], with instances of more frequent surveys noted. The last rectifier survey took place on August 28, 2016, at Station 5199+27 (12 days prior to the leak, 0.84 miles D/S from the failure location). During the recoating project in 2015, which is discussed in detail in Section 4.1.3, visual inspection in the field indicated that the measured wall loss due to external corrosion was minimal. The metallurgical analysis performed by BMT did not identify corrosion coincident with the wrinkle [Ref 11].

4.1.3 Maintenance Activities

A previous leak occurred on Line 01 on November 18, 1980, at Station 5153+55 [Ref 29]. The leak site was described as approximately 35 feet west of the center line of Peel Creek near the edge of a beaver pond [Ref 29]. This is located approximately 185 feet U/S from the September 9, 2016 failure location. The creek is unnamed on subsequent alignment maps but corresponds to a branch at Station 5153+55 that is located, relative to the failure location, approximately 150 feet U/S and at the base of the hill [Ref 20]. The leak was described as pipe laying on rock, "*A buckle about 12 inches in diameter with 3 hole (sic) in the pipe where the pipe was in contact with the rock.*" The leak was sleeved with a clamp on November 22, 1980 [Ref 29]. The clamp was cut-out and replaced sometime in 1999 with 31 feet of API 5L Grade X52 line pipe with a 0.375-inch nominal wall thickness.[11]

The recoating project (July 14, 2015 to August 6, 2015) was performed on Line 01 between Station 5154+57 and Station 5155+62[13] (approximately 100 feet was recoated). As is Colonial's practice, the pipeline segment for recoating was chosen based on results of CIS and the results of their corrosion threat reduction (CTR) program. CIS results are validated and integrated with data from ILI assessments. Recoating areas are identified by line segment and approved by the System Integrity Program Management (SIPM) team for implementation by district project personnel.[11]

The 2015 recoating project was conducted by CECO Pipeline Services.[11] The pipeline was initially excavated and supported by timber skids at 20-foot intervals.[11] No water seeps or springs were noted in the ditch line.[11] Soils were described as rocky, and approximately two feet of rock, described as slate, was removed from below the pipe to facilitate the recoating process.[11] Following recoating of the segments between the skids, the pipeline was supported by additional skids in the recoated section and the initial skids removed for surface preparation and coating of the bearing surfaces.[11] Recoating was performed under Colonial maintenance procedure CM-102, "Excavation and Backfill" [Ref 27], and procedures included in Colonial's Pipeline Maintenance Manual[11] and Corrosion Prevention Manual [Ref 27]. The pipeline was wrapped with rock shield prior to backfill.[11] Backfill consisted of native soil placed with an excavator bucket that was used for compaction.[11] No compaction tests were conducted.[11]

The recoating project occurred approximately 185 feet D/S from the pipe section that was replaced with 0.375-inch nominal wall thickness pipe in 1999. The pipe inspection report from the recoating project lists six features identified as rock gouges and external metal loss (i.e. external corrosion) [Ref 24]. Figure 6 contains a photograph of the deepest feature (Station 5155+03) and a table summarizing the features identified during a recoating project of Line 01 between Stations 5154+57 and 5155+62 [Ref 24]. The maximum feature depth identified was at Station 5155+03,[14] which corresponds to 14.2% of the nominal wall thickness (0.281 inch). The corrosion features identified were not coincident with the location of wrinkle. Two of the six features were remediated by grinding prior to recoating, the remaining features were deemed by Colonial personnel to not require remediation. Magnetic particle inspection (MPI) of the features was carried out in the field, and no crack-like features were identified during MPI [Ref 24].

13 Station numbers as calculated by DNV GL based on survey data, ILI logs and alignment sheets provided by Colonial. These station numbers correspond to the recoating pipe inspection report for station number 5154+37 to 5156+37.

14 Station Number was taken from the field report and thus may differ slightly from ILIs and calculated values by DNV GL.

At the time of the 2015 recoating project, the buckling that ultimately resulted in the September 2016 leak was not identified, thus indicating that the buckling occurred sometime following the recoating of the Stopple Segment.

4.1.4 Environmental Conditions

Figure 1 contains photographs of the failure site, and the map in Figure 2 show the failure site and surrounding areas. The terrain near the leak site consists of rolling foothills. Prevalent drainage is north toward the Cahaba River through various creeks and tributaries. Primary land use consists of logging, surface mining, and oil production. The leak site is within the Cahaba River Wildlife Management Area. The Stopple Segment runs generally from west to east and uphill, as observed in the direction of flow. The south edge of the ROW consists of a cut bank approximately 10 feet high. The north edge of the right of way slopes to the west northwest toward the branch at the bottom of the hill. Line 02 is approximately 33 feet to the south of Line 01. The original topography prior to pipeline construction appears to have been a cross slope that was graded to produce a flat uphill grade. It is unknown if additional grading, cut, or fill was utilized in the construction of Line 02.

Figure 7 is a plot of temperature and precipitation versus date between July 1, 2015, and August 31, 2015, for Helena, Alabama.[15] The total precipitation and averages high / low temperatures are shown in a table in the upper right corner for the dates of the recoating project (July 14, 2015 through August 6, 2015). As shown, total accumulation of precipitation at the approximate time of the recoating was 5.3 inches with an average low and high temperature of 71.4°F and 95.5°F, respectively. This is consistent with reports that the ROW D/S of the recoating location was wet at the time the work was completed, and required matting to access the job site.[11]

Figure 8 contains maps from the National Center for Environmental Information (NCEI) website showing the drought conditions near Helena, Alabama between April 2016 and September 2016[16] and a table summarizing drought severity classifications[17]. As shown in Figure 8, drought conditions were present between May 2016 and September 2016. Moderate drought conditions were also present in July 2015, which coincided with a portion of the 2015 recoating project.[16]

15 http://www.usclimatedata.com/climate/helena/alabama/united-states/usal0812/2015/8
16 NCEI website: https://gis.ncdc.noaa.gov/maps/ncei/drought/global
17 http://droughtmonitor.unl.edu/about/us/classification/scheme.aspx

No flooding events were noted near Pelham, Alabama between July 2015 and September 2016.[18]

4.1.5 Integrity-related Inspections

Multiple integrity assessments including a hydrotest, in-line-inspections (ILIs), periodic threat/risk evaluations, and risk rankings were performed on the Stopple Segment. The first assessment was the commissioning hydrostatic pressure test (herein referred to as a hydrotest) that was performed after the segment was completed. The hydrotest took place between January 7 and 8, 1963, [Ref 19] and the results of the pressure test were accepted [Ref 19].

Six ILIs were performed on Line 01 between 1986 and 2012 [Ref 3, 12, 23]. The ILIs were run in 1986, 1996, 1997, 2004, 2009 and 2014 by VETCO, British Gas, Tuboscope, BJ Services, NDT Services, and BJ Pipeline Inspection Services, respectively. The 1996 ILI was performed using an elastic wave tool to identify anomalies indicative of railway fatigue cracking, thus the results of that ILI were not considered to be relevant and were not reviewed as part of this investigation. The anomalies identified during the remaining inspections were compiled and provided to DNV GL in a spreadsheet (the Vendor reports were not reviewed). Figure 9 is a donut plot summarizing the types of features identified on Joints 266940 and 266950 of Line 01 for the ILIs, except for the 1996 tool run [Ref 23]. Note that the failure location is 2.4 feet D/S of GW 266950 on Joint 266950. As shown in the figure, there were four calls for bends. These calls are associated with two field bends, one installed U/S and one installed D/S of the failure location. These bends were located approximately 32 feet U/S and 30 feet D/S, respectively, from GW 266950 [Ref 23].[19]

Fifty-seven (57) of the features / anomalies identified in the ILI calls were associated with external corrosion, which was determined to be the primary threat to this line [Ref 19]. Threat identification is discussed in Section 4.1.6. Many of these instances are likely replicates between ILI runs; however, a study to determine which were similar features was not performed. One feature is located 2.4 feet D/S of GW 266950 at the 6:30 orientation (Station 5155+04[19]), which was located 180° orientationally from the failure location / wrinkle. All other external corrosion features were greater than 1.4 feet from the wrinkle. Three instances of ovality (Joint 266940: Stations 5154+64 & 5154+65 and Joint 266950: Station 5155+35)[19] were recorded [Ref 23]. It is likely that the features at Station 5154+64

18 National Oceanic and Atmospheric Administration (NOAA) Storm Events Database https://www.ncdc.noaa.gov/stormevents/listevents.jsp?eventType=ALL&beginDate_mm=09&beginDate_dd=01&beginDate_yyyy=2011&endDate_mm=09&endDate_dd=30&endDate_yyyy=2016&county=SHELBY%3A117&hailfilter=0.00&tornfilter=0&windfilter=000&sort=DT&submitbutton=Search&stateFips=1%2CALABAMA

19 Station numbers as calculated by DNV GL based on survey data, ILI logs and alignment sheets provided by Colonial.

and 5154+65 are the same feature. These were located approximately 37 feet U/S of GW 266950, suggesting that the ovality called in these areas is associated with the bending process used to form the field bend located approximately 30 feet U/S of GW 266950 [Ref 23]. Similarly, the ovality located in Joint 266950 is approximately 33 feet D/S of GW 266950, suggesting that the ovality is associated with the forming of the field bend located approximately 30 feet D/S of GW 266950 [Ref 23]. Remaining features, such as seam weld defects and dents were remote to the failure location. Based on the ILI data from 2014, there were no anomalies consistent with buckling identified at the failure location.

4.1.5 Risk Assessments

As part of their integrity management program, Colonial performs a threat/risk assessment evaluation for nine threats [Ref 19]:

(1) Third party and mechanical damage,

(2) External corrosion,

(3) Manufacturing defects,

(4) Construction defects,

(5) Incorrect operations,

(6) Equipment,

(7) Stress corrosion cracking (SCC),

(8) Internal corrosion, and

(9) Outside forces.

Figure 10 is a summary of the risk assessment model used by Colonial at the time of the leak. Colonial utilizes a relative risk assessment model that weights the sum of threats multiplied by a consequence factor [Ref 19]. The relative risk of each threat is determined using a combination of drivers, resistance factors reducing the threat, indicators of increased risk, and protections to mitigate the threat. Buckling is considered under the construction defects threat. Drivers of buckling failures considered by Colonial are construction year practices and standards associated with backfilling, and are weighted at 25% of the total threat. Pipelines installed prior to 1960 receive the maximum of ten points. Pipelines installed prior to 1970 receive seven, prior to 1982 three points, and 1982 and later zero points. No weighting is given to maintenance activities. Resistance to construction defects is provided by pipeline section modulus represented as the diameter to wall thickness (D/t) ratio. This resistance reduces the threat by a factor of 0.10 to 1.5.

Indicators of increased construction defect threats include geometric anomalies identified through ILI and leaks related to buckling. Indicators, if present, increase the threat by a factor of 1.0 to 1.5. Protection against construction defect threats is provided through integrity assessments. The use of external corrosion direct assessment (ECDA), metal loss ILI, and geometry ILI reduce the threat by a factor of 0.25 to 1.0 based on the age of the assessment [Ref 19].

The Outside Forces threat does not specifically address buckling as a risk, but weights seismic hazards (10%), landslides (10%), and depth of cover (DOC) (15%). Resistance factors include pipe manufacture standards and practices grouped by vintage. Indicators include geometric anomalies and leaks causes by natural forces. Protection includes various ROW patrol activities, DOC, and the age of integrity assessments [Ref 19].

4.1.7 Depth of Cover

At the time of construction, the specified minimum DOC by Colonial for the Stopple Segment was 36 inches for normal excavation and 20 inches in rock ditch [Ref 40]. Since that time, the DOC data was measured on the Stopple Segment on various occasions. DOC data was taken from reports that were provided for review included CIS surveys, pig digs, recoating projects, Thread-O-Ring (TOR) fitting installations, and Test Station (TS) installations [Ref 18]. The reviewed DOC data represents estimated measurements and in some cases there may be direct measurements. It should be noted that the data provided were only used to estimate the DOC at various times between the time of construction and the time of the leak (i.e. the exact values for DOC were not precisely known).

Figure 11 is a plot showing the reported DOC data in inches versus Station for DOC1, pig digs, pipeline recoating, TOR installations, and TS installations from a variety of years [Ref 18]. The failure location is at Station 5155+04[1] and is depicted by a green dashed line in the figure. The DOC measurement that was closest to the failure location, and most recently reported, was associated with a recoating project in 2008. At that time, the DOC at Station 5154+52, located 56 feet U/S from the failure location, was 96 inches. At the time of excavation for the leak, the DOC near the failure location (Station 5155+04[1]) was 132 inches [Ref 44]. This suggests an increase of DOC between the recoating in 2008 and the date of the leak. This suggested that the DOC of Line 01 increased over time, possibly due to grading associated with the construction of Line 02, maintenance activities on the pipeline, as well as third party activities in the area. A timeline of third party activities is provided in Section 4.2.2.

4.1.8 Operations and Leak Detection

Figure 12 is a plot showing the pressure data from the Vance to Pelham Segment of Line 01 in psig between August 1, 2016, and September 12, 2016, [Ref 36]. The Vance to Pelham Segment contains the Steppie Segment. As shown in the figure, only one pressure event exceeded the maximum operating pressure of 584 psig [Ref 34].

To meet customer requirements and facilitate pipeline maintenance activities, Colonial occasionally transports batches of distillate on Line 01 [Ref 34]. Three batches of Ultra Low Sulfur diesel fuel (ULSD) were transported on February 21, 2016; May 4, 2016; and August 29, 2016 [Ref 34]. ULSD is slightly heavier than gasoline with a specific gravity of 0.84 [Ref 34]. The transportation of heavier ULSD in Line 01 increased the dead load of the pipeline during late August, 2016. This increased load may have contributed to late stage soil consolidation allowing for vertical movement of the pipe segment. Modeling, shown in Section 5.0, does not suggest the increased load from the transportation of a heavier product was sufficient on its own to produce the observed wrinkle from buckling.

As part of the leak detection methods used by Colonial, routine aerial patrols are performed along Line 01. The last patrol took place on September 7, 2016 – two days before the leak [Ref 32]. The patrol was conducted along the southern edge of the ROW from west to east, providing the pilot an unobscured view of the eventual failure location, leak path, and Ponds 2 and 3. Observability was described as good with no canopying of the ROW.[11] No leaks were identified during that patrol; however, one dead tree was noted adjacent to the right of way (ROW) in the in-flight notes of the pilot. No dead vegetation was visible around that tree; thus, the cause of the dead tree was ascribed to beetles and not reported to Colonial.[11]

The leak was discovered by a state mining inspector on September 9, 2016, and Colonial, for the purpose of estimating volume, assumed that the dynamic discharge occurred for approximately 48 hours prior to discovery of the leak [Ref 7]. The estimated volume of the leak (i.e. the sum of the static and dynamic discharges) was 7,370 barrels [Ref 7].

4.2 Timeline of the Incident

Figure 13 is a timeline showing key events for Line 01 from August 8, 2016, to November 12, 2016. All times are shown as Central Daylight Time (CDT). The timeline includes dates for the following:

(1) Control room activities (purple triangles)

(2) Leak discovery and calls to report (red diamonds)

(3) Activities to remove the failure location (light blue double triangles)

(4) Supplemental analyses ([illegible])

(5) The last rectifier survey (dark gray X), and

(6) The last aerial patrol (green line).

4.2.1 Discovery and Calls to Report

The leak was discovered on September 9, 2016, at 11:10 am CDT by personnel with the Alabama Surface Mining Commission, who notified Colonial's control room utilizing the emergency 800 telephone number posted on Colonial's line markers.[10] A call was placed to the National Response Center (NRC) by Colonial at 12:59 pm CDT (NRC Call Number: 1158584) [Ref 8]. The Alabama office of the Environmental Protection Agency was notified of the leak at 1:30 pm CDT [Ref 3]. Later that evening, at 11:27 pm CDT, the NRC was called again to update NRC Call Number: 1158584 [Ref 3].

4.2.2 Control Room Activities

On September 9, 2016, discharge valves at Moundville Station, Pelham Station, Vance Station, and Saint Ives Station were closed by 11:25:01 AM CDT [Ref 3]. The Control Center reported shutdown and remote isolation of this segment at 11:30am CDT. The same day, block valves at Pelham Station, Moundville Station, Vance Station, Saint Ives Station, and the D/S Cahaba River location were all closed by 3:00:00PM CDT [Ref 3]. At 3:00:00 PM on September 10, 2016, the isolation valves at Pelham Station were closed [Ref 3]. Last, the block valve for the U/S Cahaba River location was closed at 11:25:00 PM CDT on September 10, 2016 [Ref 3].

4.2.3 Site Conditions

The condition of the site at the time of the initial response was described as normal for the area. Vegetation had established over the previous recoating location and was described as approximately three feet tall with no evidence of disturbance.[11] Berms for diversion of surface water placed during the recoating project were present and intact.[11] Silt fence placed downslope of the recoating was still in place and not.[11] No fesures or sloughing of the soil, indicative of earth movement, were noted.[11]

4.2.4 Activities to Remove Failure Location

Line 01 was considered shutdown on September 10, 2016 [Ref 3]. Installation of stopple fittings was used to isolate the leaking segment, to allow for drain-down of product remaining in the pipeline, and to facilitate with construction of the Line 01 bypass. Stopples were completed on September 14, 2016, at Stations 5144+94 and 5175+17 [Ref 1]. Upon making cold cuts for the bypass pipeline, no displacement of the pipe was observed. The original segment containing the leak was isolated by welding slip-on flanges to each end.

Approximately 124 feet of pipe was exposed U/S of the D/S flange to facilitate leak site determination.

DNV GL personnel were onsite for the discovery of the failure location and the pipe removal. The failure location was identified on September 30, 2016. After removing the overburden, the pipe section containing the leak had a 6- to 7-inch gap between the bottom of the pipe and the underlying soil. A portion of the pipe section containing the failure location was removed the day after the leak was identified. It was removed by cold cutting approximately 39 feet U/S of the failure location. Upon cold cutting, the U/S end moved down, vertically, approximately 5 inches, with little to no axial or lateral displacement. No rotation at the cut end was observed. The pipe section, which was 116 feet in length, from the cold cut to the D/S blind flange was removed in one piece from the ditch. The pipe was torch cut into three sections for transportation of the section containing the leak for metallurgical analysis.

4.2.5 Supplemental Analyses

Two geotechnical surveys were performed near the failure location, one before [Ref 45] and one after [Ref 46] removal of the pipe section containing the failure location. The first survey was performed by NOVA Engineering, Inc. on September 23, 2016, (NOVA) [Ref 45] to confirm the failure site could be excavated without affecting the stability and support needed for the Line 01 bypass pipeline. The soil was described as, "*dense sandy soil and rock lenses.*" Based on this observation, the soil in the area is expected to "*experience rapid consolidation, often with 60% to 80% of the total settlement occurring concurrently with* [the] *load application, and with 60% to 80% of any remaining settlement occurring within a few days and weeks.*" Additionally, NOVA stated that "*no visual evidence of subsidence or slope instability was noted.*"

The second geotechnical survey was conducted by NOVA on October 13, 2016, after removal of the pipe section. The soil testing results from this survey are shown in Table 1. The schematic below the table shows the locations of samples relative to the following:

(1) The bypass,

(2) The portion of the pipeline that was recoated in 2015, and

(3) The portion of the pipeline that was excavated following the leak.

Undisturbed native (Boring Samples B4-1 and B4-2, red) and backfill (Boring Samples B1-1 and B1-2, green) soils were collected and analyzed. These samples were believed to be representative of the soils at the original time of construction. Bulk ([redacted]) and boring (Boring Samples B3-1 and B3-2, blue) samples of the backfill material used following the

failure were also collected and analyzed. The results show that all samples analyzed were classified as a variation of clay (i.e. lean clay, clayey sand, clayey gravel, and clayey sand – silty sand). In general, the undisturbed native and backfill soils had lower moisture contents, greater porosity, and higher resistivities than the backfill soils used after the failure. A comparison of the results for the undisturbed native with the undisturbed backfill soils indicates that the backfill was generally drier than the native soil.

None of the soils analyzed by NOVA were in a fully saturated condition. Based on Figure 66 on page 155 of Romanoff's *Underground Corrosion*,[20] saturation of a clay soil generally occurs at a moisture content greater than approximately 35%. The moisture content of all the soils were well below this value, indicating that the as-collected soils were relatively dry. This is consistent with the drought conditions that were noted in this region of Alabama, as discussed in Section 4.1.4. Liquid limits (LL) and plastic limits (PL) were determined for each soil tested. The results show that the individual moisture content for each soil falls below their respective LL and PL. This indicates that the as-collected soils should behave as solids and in an incohesive manner.

Figure 14 contains photographs of the failure site showing the ditch line after removal of the excavated portion of Line 01. The D/S location of the recoating project can be clearly seen in the appearance of the backfill material, which did align with the coating change and coating overspray in the ditch. No springs, seeps, or groundwater were observed in the removed pipe section ditch line. Soil immediately under the removed pipe section was observed to be densely packed with no voids or evidence of erosion. It should be noted that there were no reported visual indications (soil subsidence visible at the surface) before or after the leak indicating that the 2015 recoating project and desiccation of the soil had resulted in inadequate vertical support of the pipe.

4.3 Timeline of Third Party Activities

Figure 15 is a timeline showing third party activities near Line 01 from January 1, 2005 to November 12, 2016. The timeline includes dates for the following:

(1) Activities at the Twin Pines mine on the property currently owned by VLCT (dark green diamonds),

(2) Logging activities ([illegible]),

(3) Other third party activities (purple double triangles),

20 Romanoff, Melvin, *Underground Corrosion* (1989).

(4) Other events observed during the aerial observation reports (AORs, dark blue triangles),

(5) Dates for the incident (red diamond),

(6) The last rectifier survey (dark gray X), and

(7) The last aerial patrol (green line).

For reference to discussions related to reported information in the AORs, Figure 16 shows the locations of Aerial Markers 578, 579, and 580 (purple markers) and their corresponding Station Numbers.

4.3.1 Activities Associated with the Twin Pines Mine on the Property Currently Owned by VCLT

A surface coal mining permit for the Twin Pines mine, the property currently owned by VCLT, was applied for on December 3, 2007 [Ref 10]. This permit was associated with SECO Mine Number 1, and was located to the south of Line 01 and Line 02 [Ref 10]; shown in Figure 2. The Permanent Program Permit (P-3901-58-13-5) was issued on February 7, 2008, with an expiration date of February 6, 2013. On February 25, 2009, a hydrology report was produced by Twin Pines for the Approval of Ponds 1, 2, and 3 [Ref 32]; shown in Figure 2. Ponds 1, 2, and 3 were sedimentation basins used to support the surface mining activities. The completion date for the Ponds is not known; however, the ponds are visible in Google Earth imagery on September 4, 2010; shown in Figure 17.[21] After the expiration of the surface coal mining permit in 2013, there is no evidence provided regarding continued surface mining and no evidence of a renewal of the permit. It is worth noting that, during mining operations at the Twin Pines mine (the property currently owned by VCLT), Colonial established a seismic monitoring program to determine if there was seismic activity exceeding 2.0 inches per second for peak particle velocity (PPV).[11] The PPV value was established by the United States Bureau of Mines.[11] Based on that monitoring, the PPV did exceed 2.0 inches per second likely due to blasting activities related to mining; however, this was not a frequent occurrence.[11] The seismic monitoring of the area adjacent to the pipeline was suspended prior to 2013 (i.e. after mining activities in the area had ceased).[11]

4.3.2 Activities Associated with Logging

AORs filed by the aerial patrol subcontractor utilized by Colonial were used to identify the dates of the most recent logging activity. Noted observations and comments from AORs between Aerial Markers 577.5 and 580.4 were provided for review for dates between March

21 Google Earth Pro near GPS Coordinate: 33.235271 Latitude by -86.915268 Longitude.

7, 2011 and July 19, 2016. The leak is located, approximately, near Aerial Marker 579.5; see Figure 18. Table 2 summarizes logging activity noted in the AORs provided by Colonial [Ref 32]. Eleven instances of logging activity were noted between March 20, 2013 and January 31, 2014 from AM 577.5 through AM 580.4. No other instances of logging activity were noted outside the specified timeframe.

Figure 17 contains maps showing changes in the surrounding area of Line 01 due to logging and mining activities.[31] The map from September 4, 2010, shows some evidence related to the removal of trees along the south of the ROW.[31] It is not clear if this is from logging activity or from the mining activities at Twin Pines (property currently owned by VCLT). Evidence of tree removal is visible north of the ROW starting after a Google Earth map from December 17, 2013.[31] A map from January 5, 2015, does not show an appreciable change in the tree line along the north and the south of the ROW[31], indicating that most tree removal / logging activities in this area were completed prior to 2014.

4.3.3 Other Third Party Activities

Figure 2 shows the locations of well pads near the failure location. Based on Google Earth images of this area, these well pads have been present since March 2, 2005.[31] Based on the Google Earth images and site observations, the production operations appear to be associated with vertically drilled wells using beam pumping (pump jack) units. Table 3 summarizes drilling activity and electrical work noted in the AORs provided. Eight observations from the AORs, likely related to drilling activity, were noted between March 7, 2011, and July 19, 2016, from Aerial Markers 577.5 through 579.0. The event that was closest in proximity of time to the incident was a drilling rig that was being set up 1000 feet south of the ROW on July 19, 2016, at Aerial Marker 577.6 [Ref 32]. No other instances of drilling activity were noted outside the specified timeframe.

Also, shown in Table 3, is electrical work at Aerial Marker 579.8 on October 25, 2010, associated with the erection of powerlines to the East of the property (currently owned by VCLT). No other instances of electrical work were noted outside the specified timeframe.

4.3.4 Other Events near Failure Location

Table 4 summarizes AOR observations near the leak site after July 14, 2015, the first day of the 2015 recoating project, which were not directly associated with mining, logging, drilling, or maintenance of the line by Colonial [Ref 32]. The observations include, the presence of rock piles in the immediate vicinity of the ROW at Aerial Marker 579.7, evidence of a fire on the ROW at Aerial Marker 579.3, erosion of the ROW at Aerial Marker 579.0, and the presence of vehicles near the ROW at Aerial Markers 579.1 & 579.2. The last noted

observation was on March 2, 2016. No other observations were noted outside the specified timeframe.

Natural occurrences of seismic activity were also reviewed. Earthquakes were the three most recent seismic events, based on the available data. [22] Figure 19 is a map showing the location of the most recent earthquake events near the failure location. A 3.0 magnitude earthquake occurred on April 29, 2016, and was in closest proximity to the failure location, approximately 20 miles to the northwest. A 2.6 magnitude earthquake occurred on September 5, 2016 (4 days before the leak), and was approximately 70 miles west southwest from the failure location. A 2.3 magnitude earthquake occurred on June 7, 2016 and was located approximately 120 miles northwest of the failure location. Given the timing, magnitude, locations of the events, and the absence of fissures in the soil; the effect of earthquakes was anticipated to be small and therefore was not quantified.

5.0 SUPPLEMENTAL ANALYSES

5.1 Description of the Wrinkle

The wrinkle was located 2.4 feet D/S of GW 266950 at the top of the pipe between, approximately, the 9:00 and 3:00 orientations. A through wall, circumferentially-oriented crack was located at the peak of the wrinkle near the 12:00 orientation. Non-through wall cracks were visible between the 10:00 and 1:00 orientation at the peak of the wrinkle and were, generally, circumferentially oriented. At the 12:00 orientation (i.e. failure location), the peak height of the wrinkle measured 1.33 inches on the U/S side of the wrinkle.[23]

5.2 Modeling Approach

The location of the wrinkle, both circumferentially and relative to the two overbends is inconsistent with lateral movement of the pipeline. Thus, for such a wrinkle to propagate, some level of vertical deflection was necessary. DNV GL modelled the pipe with Finite Element Analysis (FEA), using Simulia's Abaqus software. The modeling was performed to evaluate possible loading scenarios necessary to produce a similar wrinkle in the pipe section. Buckling typically occurs in long, slender objects subject to axial compression and / or lateral forces. The orientation of the two overbends upstream and downstream of the failure location could provide such a scenario where improper support between the two overbends could allow for the pipeline segment to move vertically downward, potentially due to additional overburden (See Section 4.1.7). The magnitude of these loads, coupled with the resulting wrinkle formation, was analyzed for two primary scenarios:

22 Earthquake Track: http://earthquaketrack.com/p/united-states/alabama/recent.
23 Measured using profile gage and a ruler.

- Insufficient support with vertical load from overburden – A free span model with self-weight of the pipeline, product, and only an external vertical force from the overburden and no additional axial compressive force.
- Sufficient vertical backfill support with axial compression – A model with hypothetical soil support allowing for minimal vertical deflection while applying a compressive axial force at the D/S girth weld.

To analyze these loading scenarios, a computer model of the pipeline segment was first generated using the provided ILI centerline data, presented in Northing, Easting, and Elevation coordinates for key features in the region of concern:

(1) The U/S Girth Weld 266940

(2) Bend 9515

(3) Girth Weld 266950

(4) Bend 9516

(5) The D/S Girth Weld 266960

A spline was fit to these five data points to approximate the curvature and centerline profile of the pipeline in this vicinity. A cylindrical cross section that was 36 inches in diameter was then swept along this spline to represent the outer diameter surface of the pipeline segment. This surface was then divided into a system of finite elements, connected by nodes at which results could be calculated during the analysis.

The Finite Element (FE) model was constructed using four noded shell elements with reduced integration (S4R) to accurately model the response of the pipeline segment under the applied loading scenarios and constraints. These shell elements are well suited for calculating the deformation of pipeline segments, such as the one considered here, in that they provide accurate results while being computationally efficient. The nominal wall thickness of 0.281 inches was applied to the section, with five integration points (i.e. nodal result values) through the thickness of the material.[34] The FE model was an elastic-plastic simulation using material properties for API 5L, Grade X52 line pipe steel obtained from the tensile test data provided by BMT.

34 The nominal wall thickness, 0.281 inches, was used for the two pipe joints that were modeled. The nominal wall thickness was between the average values that were measured at the U/S and D/S ends of the pipe section cutout (i.e. locations way from deformation due to buckling). These values were 0.291 inches and 0.278 inches, respectively [Ref 11]. Note that the wrinkle formed by buckling in the D/S joint.

5.2.1 Boundary Conditions and Loading

The extent of the pipeline FE model consisted of the pipeline segment between the U/S and D/S overbends. The U/S overbend was fixed in all translational degrees of freedom but allowed to rotate about the neutral axis of the pipeline between the 3:00 and 6:00 orientations. The D/S overbend was constrained in a similar fashion; however, in addition to being allowed to rotate about the neutral axis, axial translation along the centerline of the pipeline was allowed. The density of the pipe steel (approximately 484 lbm/ft^3) and the density of the product (approximately 45 lbm/ft^3 for gasoline and 52 lbm/ft^3 for oil) were applied to the model in the form of an equivalent density for the pipeline section by calculating the total mass of each component and dividing by the density of the modeled pipeline segment.

The weight of the soil was calculated by first approximating the volume of the overburden to be a rectangular column directly above the pipeline. This consisted of the length between the two overbends (approximately 58.5 feet, not accounting for elevation changes of the pipeline) the outer diameter of the pipe (3 feet) and an approximate DOC (assumed to be 6 feet). The density of the soil was calculated based upon the soil borings, which indicated a specific gravity of approximately 2.68. This resulted in a soil weight of approximately 176,152 lbf. The weight of the soil was applied to the model using a Body Force load in Abaqus, which was specified to act in the vertical downward direction.

The buckling analysis was performed using Abaqus Standard, Version 6.14-1. FE modeling of a wrinkle formation is typically assessed as a two-part analysis. First, a static eigenvalue buckling analysis is used to calculate the critical buckling loads and buckling mode shapes, relative to the base state of the structure. A post-buckling analysis is then used to model the pipe deformation response after a wrinkle propagates.

For the initial eigenvalue buckling analysis, the structure was preloaded with internal pressure and the combined self-weight of the pipe and the product. A static load, representing the weight of the soil was then applied for the buckling simulation to extract the eigenvalues and related buckling collapse modes.

For the post-buckling analysis, these eigenvalues were seeded into the un-deformed geometry as minor imperfections (2% of the wall thickness)[19] in the pipe wall. Buckling initiation and propagation is highly unstable and is sensitive to minor imperfections in the structure, from manufacturing, deformation, or other impurities. By seeding the geometry

19 API 5LX, 10th Edition (1962) specifies that line pipe with nominal diameters 20 inches and larger can have an allowable tolerance on wall thicknesses of +15%/-10% of the nominal value. By comparison, the 2% defects seeded for the modeling are significantly smaller.

with these minor imperfections, the predicted eigenmodes and likely collapse modes of the structure were considered. Additionally, seeding the structure with minor imperfections, generally provides a more accurate prediction of the load necessary to initiate buckling, as a theoretically 'perfect' model may have a higher resistance to buckling instability than the represented structure. The loading and boundary conditions for the initiation of buckling and post-buckling analysis were the same as the eigenvalue simulation. The first step of the analysis included the internal pressure of the pipeline along with the combined self-weight of the pipe and the product. The next step in the analysis utilized the modified Riks method to predict the unstable collapse and post buckling behavior of the structure with the additional weight of the overburden included. The modified Riks method is an algorithm used to solve cases where the load and / or displacement of the structure may decrease as the solution evolves. The load applied during the Riks step is treated as an additional unknown, assumed proportional to the displacement, and is scaled based upon the load proportionality factor (LPF) in Abaqus, which can then be used to calculate the load necessary to initiate and propagate buckling in the structure. Buckling initiation for the analysis was defined as the maximum LPF from the Riks analysis step. The decrease in applied load after this point indicates the point at which elastic instability occurs.

5.2.2 Results and Discussion

Several sensitivity studies were performed with each of the model configurations to evaluate the load, either axial or vertical, necessary to initiate a wrinkle. The models under primary consideration for the analysis were:

(1) The free span model, used to represent insufficient support underneath the pipeline segment from the 2015 recoating project and subsequent loss of support with a vertical load to simulate the overburden

(2) The axial compression model, used to represent a lack of cohesion between the pipeline and the surrounding soil, and

(3) The effect of pressure was modeled to estimate the amount of deflection at the location of the failure for two conditions: no internal pressure and the calculated internal pressure at discovery.

5.2.2.1 Free Span Model

Due to the high variability and lack of details regarding the soil properties at the time of the failure, a free span model was considered as a worst case to evaluate what magnitude of force was needed to initiate a wrinkle in the pipe segment. The boundary conditions and loads for this model are discussed previously in Section 5.2.1. This free span model was analyzed with and without seeding imperfections. As expected, the load necessary to initiate

the wrinkle was lower when imperfections were included in the assessment, due to the high sensitivity to geometric imperfections for buckling. The LPF at the initiation of the wrinkle for the model seeded with imperfections was 0.605 while the free span model without seeded imperfections resulted in an LPF of 0.646. As the LPF is a direct multiplier on the unit load applied to cause buckling, the vertical load at which the wrinkle initiated was predicted corresponds to 60.5% and 64.6% of the 6-foot DOC soil overburden load applied to the pipe segment. The loads at which the initiation of the wrinkle was predicted are well below the estimated weight of the overburden for a 6-foot DOC, as this was capturing a worst-case scenario of no vertical support from the soil between the two overbends.

For the model without seeded imperfections, the center of the wrinkle was located approximately 9.5 inches downstream of Girth Weld 266950. Including the imperfections from the predicted eigenmodes shifted the wrinkle location further downstream of Girth Weld 266950, with the center of the wrinkle located approximately 26 inches downstream of the girth weld. This compares well with the actual wrinkle location, which was measured to be approximately 29 inches downstream of Girth Weld 266950. A side view comparison of the field-scanned surface of the wrinkled pipe section is shown overlaid with the predicted wrinkle formation from the Free Span FEA model (seeded with imperfections) in Figure 20. In general, the location of the wrinkle, relative to the girth weld, as well as the height and circumferential extents of the wrinkle from the FEA model showed good agreement with the field observed wrinkle geometry. The vertical deflection of the pipe required to cause the wrinkle for these two scenarios was 5.7 inches for the model seeded with imperfections and 6.4 inches for the model without seeded imperfections. Note that field observations described a 6- to 7-inch gap between the bottom of the pipe and the underlying soil near the wrinkle location upon removal of the overburden.

The same post-buckling model with seeded imperfections was analyzed incorporating the weight of fuel oil used in the batching runs to compare the level of force needed to propagate a wrinkle. Incorporating fuel oil (ULSD) as the product decreased the external load requirement by approximately 4%.

5.2.2.2 Axial Compression Model

Several simulations were performed accounting for some generic soil support to determine the magnitude of axial force needed to initiate the wrinkle considering adequate vertical support from the surrounding soil. The soil was modeled as an additional deformable solid body using continuum elements in Abaqus whereby the elastic material properties of the soil were adjusted until minimal vertical deflection was achieved. The primary concern associated with this model was the axial force required to propagate a wrinkle in the presence of adequate support from the soil, not necessarily the elastic-plastic response of

the soil. Thus, the elastic properties of the soil were adjusted until the maximum vertical deformation of the pipe was between approximately 2 and 3 inches, roughly ⅓ – ½ of the deflection necessary to propagate a wrinkle from the free span model. The overburden load, assuming a 6-foot DOC, was applied to the model in the same fashion as the free span models. An axial force was then applied at the downstream over bend, oriented along the pipe axis in the upstream direction, placing the pipe in axial compression. The axial load required to initiate a wrinkle under this loading scenario was approximately 986,000 lbf. The center of the wrinkle was located approximately 2.75 inches downstream of Girth Weld 266950 and the model predicted approximately 1.8 inches of vertical deflection of the pipeline segment. The level of axial force is well outside the realm of expectations in this region, in the absence of any extraordinary external forces acting on the pipeline. As a point of comparison, the combined weight of the pipe segment, product, and 6-foot overburden between the two overbends is approximately 201,000 lbf.

5.2.2.3 Effect of Internal Pressure Model

Pressure fluctuations due to normal operation are visible in the pressure data from early August to early September 2016. Modeling of the pipeline with and without internal pressure was conducted to determine the extent and direction of pipe deflection due to internal pressure changes. The model incorporated local pipeline free span geometry and excluded any contribution from localized soil support under both the calculated internal pressure and no internal pressure (worse case). Results of the model indicated that the deflection of the pipeline would have been minimal (0.034 inches) in the downward direction under the calculated internal line pressure.

6.0 ROOT CAUSE FAILURE ANALYSIS

A root cause(s) is (are) defined by PHMSA as "*the basic, underlying causal factor[s] in an accident or other event scenario which if removed would have prevented the accident or event from occurring.*"[26] ***The technical root cause (causal factor) of the CR-91 Incident was inadequate soil consolidation under Line 01 following maintenance / recoating activities in 2015.***

DNV GL performed a causal analysis using the BSCAT™ methodology for the RCFA. This analysis identified the preventative barriers that were in place at the time of the CR-91 Incident. By evaluating these barriers and the relevant information related to the incident, the technical root cause and lessons learned were determined.

26 PHMSA Pipeline Glossary http://primis.phmsa.dot.gov/comm/glossary/index.htm?nocache=6217#RootCause

Figure 21 is the BSCAT™ diagram of the CR-91 Incident showing the barriers identified: (1) application of maintenance activities and practices to ensure the pipe remains at its original state; (2) identification of changing ROW and external loading conditions, natural and manmade; and (3) identification of anomalies, inclusive of pipe deformation, using ILI. Below is a summary of the barriers and their corresponding contributing factors.

Barrier 1: *Application of maintenance activities and practices to ensure the pipe remains at its original state.*

Based on the available information and data reviewed by DNV GL, the application of maintenance activities performed during a recoating project in 2015 appears to have resulted in inadequate vertical support of the pipeline that created an external loading condition conducive to buckling at the failure location on Line 01.

Barrier 2: *Identification of changing ROW and external loading conditions, natural and manmade.*

The desiccation of the soil was not fully accounted for as an integrity threat.

Barrier 3: *Identification of anomalies, inclusive of pipe deformation, using ILI.*

Though ILI runs were regularly performed on Line 01, the recoating project occurred between ILI runs precluding identification of any ovality or displacement (i.e. external loading conditions) on the pipeline prior to the leak.

These barriers and their corresponding contributing factors are discussed in detail in the subsequent sections.

6.1 Barrier 1: Application of Maintenance Activities and Practices to Ensure the Pipe Remains at Its Original State

The application of maintenance activities and practices associated with the 2015 recoating project within the failure site did not provide adequate vertical support for the pipeline. Modeling performed by DNV GL indicates a displacement of five to six inches would be necessary to replicate the buckling that formed the wrinkle, which is consistent with the observed deflection and subsequent gap under the pipe after evacuation and excavation. The activities performed onsite would suggest that adequate load bearing capacity was not achieved. The unique site conditions and geometry of the recoated section contributed to the need for consolidated bearing soils following backfill.

Factors specific to the failure location that increased the susceptibility to buckling were the length of the unsupported span, the ratio of pipe diameter to wall thickness, and the increased depth of cover. The time delay between the 2015 recoating project and the leak suggests that the length of the free span and / or the bearing capacity of the soil changed during this time interval. The length of the free span immediately following the recoating project in 2015 is not precisely known.

The high D/t ratio of Line 01 (128) results in a low section modulus and an increased threat for buckling, dents, and other geometric deformations. The presence of field over-bends U/S and D/S of the failure location served to concentrate bending moments approximately equidistant between the bends. While field bends are not injurious in isolation, when combined with localized settlement and the high D/t ratio, the loads were sufficient to produce buckling at the D/S Girth Weld 266950, as demonstrated by DNV GL's modeling.

The sources of the external loading that resulted in the buckling were the pipe weight, the product, and the soil (i.e. depth of cover). Though the depth of cover for Line 01 met the minimum requirement of 20 inches for a rock ditch at installation, there is evidence of an increase in depth of cover between 1963 and 2016 that contributed to the loading conditions at this location. A singular cause for the increase in depth of cover could not be identified, but it may be attributable to the installation of Line 02, pipeline maintenance prior to the 2015 recoating project (as referenced in the timeline), and / or the construction of Ponds 1, 2, and 3.

6.3 Barrier 2: Identification of Changing ROW and External Loading Conditions, Natural and Manmade

The time dependent nature of the failure indicates that the pipe support and / or the free span of pipeline changed between the time of the recoating in 2015 and failure. As demonstrated by the supplemental analysis (free span model), a lack of support and the application of a vertical load consistent with local conditions would result in a wrinkle similar to that observed in the field.

The undisturbed nature of the site does suggest that there were no third-party activities following the recoating project in 2015. Similarly, the lack of mining activity or additional drilling post 2015, and the lack of evidence of land movement discussed in Section 4.3.4, suggest earth movement was not a contributing factor.

The delayed failure suggests that continued soil settlement may have occurred after the normal soil consolidation following exposing the pipeline and backfilling. This indicates that the conditions of the ROW changed between the time of the 2015 recoating project and the time of the failure. With additional soil settlement, an increase in the length of the

unsupported span of the pipe would have occurred. There is insufficient data / information to establish the relative contribution, if any, of each potential factor quantitatively. However, a review of the available information by DNV GL identified that the most likely potential contributor to the additional soil consolidation was associated with climate events.

Natural disasters are a recognized threat in Colonial's Pipeline Risk Assessment Model under Outside Forces; however, the effect of soil desiccation due to drought conditions was not fully considered. It should be noted that the consideration of drought as a threat to pipeline integrity is not widely used in the industry as part of risk assessments. Supporting evidence for desiccation of the soil include soil testing near the failure location that indicated the soil was dry and climate data from this region of Alabama that indicated intermittent drought conditions.

An additional factor that may have contributed to the soil settlement, though to a lesser degree, is the transportation of heavier ULSD in Line 01. This would have increased the dead load of the pipeline during late August, 2016. This increased load may have contributed to late stage soil settlement decreasing the length of the supported span of pipe. Modeling, shown in Section 5.0, does not suggest the increased load from the transportation of a heavier product was sufficient on its own to produce the observed wrinkle from buckling.

Additional factors reviewed by DNV GL that may have had minor contributions, if any, to the failure include: third party activities in the immediate vicinity of Line 01, earthquakes, land movement, and pressure fluctuations during normal operating conditions. The undisturbed nature of the site indicates that there were no third-party activities following the recoating project in 2015 in the immediate vicinity of the Line 01. Similarly, the lack of additional mining activity and no evidence for the installation of well pads post 2015 suggest that third parties did not play a major role. Given the timing, magnitude, locations of the events, and the absence of fissures in the soil; the effect of earthquakes was anticipated to be small. A geotechnical survey conducted immediately after the incident indicated that there was no visible land movement (Section 4.3.4) from other natural seismic events, indicating that it was likely not a contributing factor. Pressure fluctuations from normal operation are visible in the pressure data from early August to early September 2016. Modeling of the pipeline by DNV GL with and without internal pressure indicated that the deflection of the pipeline would have been minimal (0.034 inches), thus it is unlikely that the pressure fluctuations contributed significantly to the soil settlement.

There is insufficient information at this time, however, to quantify the contribution of each of the factors discussed above to the failure. Furthermore, based on the evidence, scientific

analysis, and modeling that was performed, the failure would not have occurred if there had not been the recoating activity.

6.3 Barrier 3: Identification of Anomalies, Inclusive of Pipe Deformation, using In-line Inspection

Outside forces and construction defects are identified as threats by Colonial and managed through ROW observation and integrity assessments. Frequent ILI tool runs were performed on Line 01 to aid in the management of the integrity from these threats.

The last ILI on Line 01 was performed in 2014 using a magnetic flux leakage (MFL) and caliper combination tool. Prior to that, ILIs were performed in 2004 and 2009. These indicate that a five-year re-inspection interval was utilized by Colonial for Line 01, suggesting that the next ILI tool run would have occurred in 2019 for Line 01. Comparison of data from a geometry tool run in different years may provide evidence of changing external loading conditions for Line 01. This evidence is typically manifested as changes in ovality between ILI runs, or possibly a change in pipe position. However, the recoating project in 2015 occurred between ILI runs, and thus any indicators of changing external loading conditions could not be identified. There was no evidence of ovality in the last four ILI runs in the vicinity of the failure location.

7.0 LESSONS LEARNED

The RCFA identified improvements (lessons learned) that could be made to the to the pipeline monitoring and maintenance program inclusive of the integrity management program:

- Development of a program that identifies locations similar to the failure location for the CR-91 Incident (i.e. recoating projects on a hillside with installed field bends) for evaluation to the susceptibility of buckling. Assuming similar backfill and compaction practices were utilized throughout the 2015 recoating effort, the presence of field bends increases the risk of bending moments due to soil consolidation. The hillside may have contributed to soil desiccation and the presence of increased external loads.
- Consideration to revising procedures related to backfill and excavation to provide further guidance is recommended. Specific recommendations include:
    - Compaction requirements for long excavations should be specified. Consideration should be given to the D/t ratio, soil types, the type of compaction equipment required, and post compaction testing. As necessary, an engineering evaluation and site specific support and compaction planning should be conducted to address pipeline features such as overburden, field bends, fittings, repair sleeves, etc.

- Clarification of the pipeline support requirements and methods to ensure settlement does not occur during support placement and removal.

- Continued consideration to long-term soil consolidation or settlement and its potential impact following major maintenance is recommended.

- Continued consideration of the impact of drought conditions when addressing the potential threat of natural disasters during risk assessments is recommended.

Table 1. Summary of soil test results from geotechnical survey performed on October 11, 2016 (Ref #6). Sample locations are shown in schematics below the table. Color coding in table corresponds to location colors in schematics.

Sample Name	USCS (ASTM D2487)[1]	Moisture Content (ASTM)	Atterberg Limits (ASTM)[2]	Standard Proctor	Specific Gravity (ASTM)	Unit Weight (Dry)	Porosity (%)	pH	Resistivity (ohm-cm)	CO2 Potential (SATM) Total	CO2 Potential (SATM) Effective
Native and Existing Backfill Soils – Outside of Failure Excavation Area											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
Backfill Soil within Failure Excavation Area											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1. CL = lean clay; SC/SM = clayey sand – silty sand; SC = clayey sand; GC = clayey gravel
2. LL = liquid limit; PI, = plastic limit

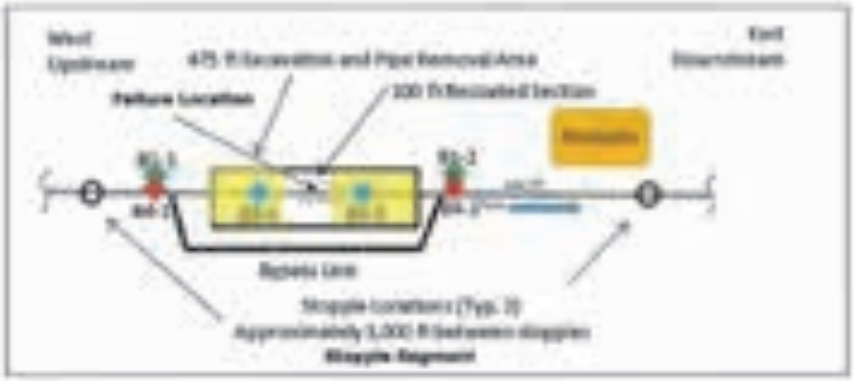


Table 2. Summary of logging activity noted in the AORs provided by Colonial [Ref 32].

Inspection Date	Segment Inspected	Observation Type	Priority Level	Aerial Marker	Brief Observations/Comments
2014-01-31	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	576.9	Logging operation north of and crossing ROW (immediately east of Twin Pine
2013-10-14	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	576.4	Logging operation 40 north of ROW
2013-07-22	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	576.3	Logging operation immediately north of ROW
2013-07-17	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	576.4	Logging operation immediately north of ROW
2013-06-17	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	576.4	Logging continues 60' south of ROW
2013-06-12	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	576.6	Logging continues 60' south of ROW
2013-05-08	HWY 82/Pelham Ste	Company Work	Priority Level 2	576.5	ROW mowers at this location; logging continues nearby
2013-04-23	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	577.8	Logging operation on both sides of ROW
2013-04-16	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	577.5	Logging now on both sides of ROW
2013-04-12	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	576.3	Logging operation immediately north of ROW
2013-03-20	HWY 82/Pelham Ste	Other - Defined in AOR	Priority Level 2	580.4	Logging operation immediately south of ROW

Table 3. Summary of drilling activity and electrical work noted in the AORs provided by Colonial [Ref 32].

Inspection Date	Segment Inspected	Observation Type	Priority Level	Aerial Marker	Noted Observations/Comments
2015-07-19	HWY 82/Pelham Sta	Other - Defined in AOR	Priority Level 2	577.0	Drilling rig is set up 1000' south of ROW in Twin Pines.
2015-06-05	HWY 82/Pelham Sta	Trackhoe	Priority Level 2	579.1	Trackhoe and pickups one quarter mile south of this location, in Twin Pines
2015-07-07	HWY 82/Pelham Sta	Other - Defined in AOR	Priority Level 2	579.2	Pickups and trailer in Twin Pines, 1/4 mile south of ROW. No drilling so far
2015-03-19	HWY 82/Pelham Sta	Other - Defined in AOR	Priority Level 2	577.3	Drill rig working a half mile south of ROW in Twin Pine
2012-09-19	HWY 82/Pelham Sta	Other - Defined in AOR	Priority Level 2	579.2	Driveway to well site has been graded up to south edge of ROW
2011-11-08	HWY 82/Pelham Sta	Other - Defined in AOR	Priority Level 2	576.5	Drill rig parked 80' south of ROW in Twin Pines
2011-10-25	HWY 82/Pelham Sta	Pipes or Poles	Priority Level 2	579.6	Power company setting poles on east end of Twin Pines
2011-09-07	HWY 82/Pelham Sta	Other - Defined in AOR	Priority Level 2	576.3	New drilling rig, 0.2 miles south of ROW, in the Twin Pines Coal operation

Table 4. Summary of AOR observations near the leak site after July 14, 2015 (i.e. the first day of the recoating project in 2015), which were not directly associated with mining, logging, drilling, or maintenance of the line by Colonial [Ref 32].

Inspection Date	Segment Inspected	Observation Type	Priority Level	Aerial Marker	Noted Observations/Comments
2016-02-08	HWY 82/Pelham Sta	Other – Defined in AOR	Priority Level 2	579.3	Indications of burning on ROW
2015-12-02	HWY 82/Pelham Sta	Other – Defined in AOR	Priority Level 2	579.7	Large rocks piled on both sides of ROW
2015-11-04	HWY 82/Pelham Sta	Erosion	Priority Level 2	579.0	Deep wash begins immediately north of ROW

Figure 1. Photographs of the Failure Site showing the excavated portion of Line 01, the Line 01 Bypass, and the failure location

Figure 3: Map showing the locations of Line 01 ([redacted] line), the reseating area from the 2013 project (purple line), the failure location (red arrow), the U/S and D/S by-pass cut locations ([redacted] markers with diamond and star, respectively), the U/S and D/S thrustlink (light red markers with diamond and star, respectively), the locations of Faults 1, 2, and 3 (light blue marker), the locations of wall pads (light green markers), and the locations for mining ([redacted] area on the map) and logging ([redacted] area on the map).

Figure 3. Photograph of the pipe section cutout from the failure site that was sent to BMT for the immediate cause analysis [Ref 16]. The cutout section contained the failure location which was located at the wrinkle shown in the photograph.

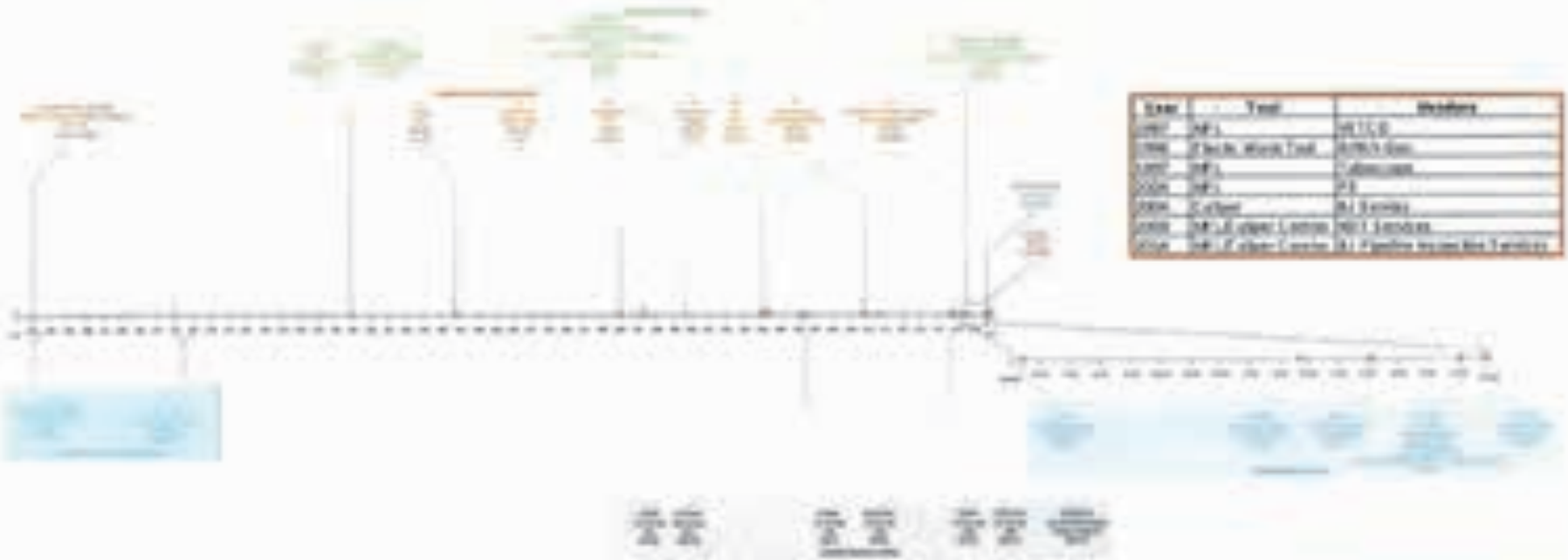


Figure 4. Historical timeline showing key events for Line 01 from the start of construction in August of 1962. The timeline includes dates for (1) original construction activities (light blue examples are highlighted), (2) CIS surveys (dark gray hi and lowlands), (3) integrity-related assessments (orange triangles), (4) maintenance activities (light green triangles), and (5) operations activities (dark blue circles). Dates for the incident (red diamond), the last rectifier survey (dark gray +), and the last aerial patrol (green line) are also shown. A table summarizing the ILIs is embedded in the image.

Figure 5. Map showing the locations of Line 01 ([redacted] line), a linear anode (blue line), the failure location (red arrow), the U/S and D/S Rectifiers (green markers with diamond and star, respectively), and the U/S and D/S Stopples (light red markers with diamond and star, respectively).[21]

Station	Length (inch)	Width (inch)	Depth (inch)	Orientation	Comments
5155+02.3	2.000	1.000	0.035	9:30	
5155+03	0.500	0.500	0.040	11:00	
5155+04[1]	33.000	0.125	0.004	9:54 to 10:30	Rock Gouge: Removed by Grinding
5155+05.5	0.500	0.250	0.038	9:50	
5155+10	12.000	0.125	0.020	3:30	Removed
5155+40.8	0.500	0.500	0.020	Not Provided	

Figure 6. Photograph of the deepest feature (Station 5155+03)[16] and a table summarizing the features identified during a 2015 recoating project of Line 01 between Stations 5154+57 and 5155+62 [Ref 24].

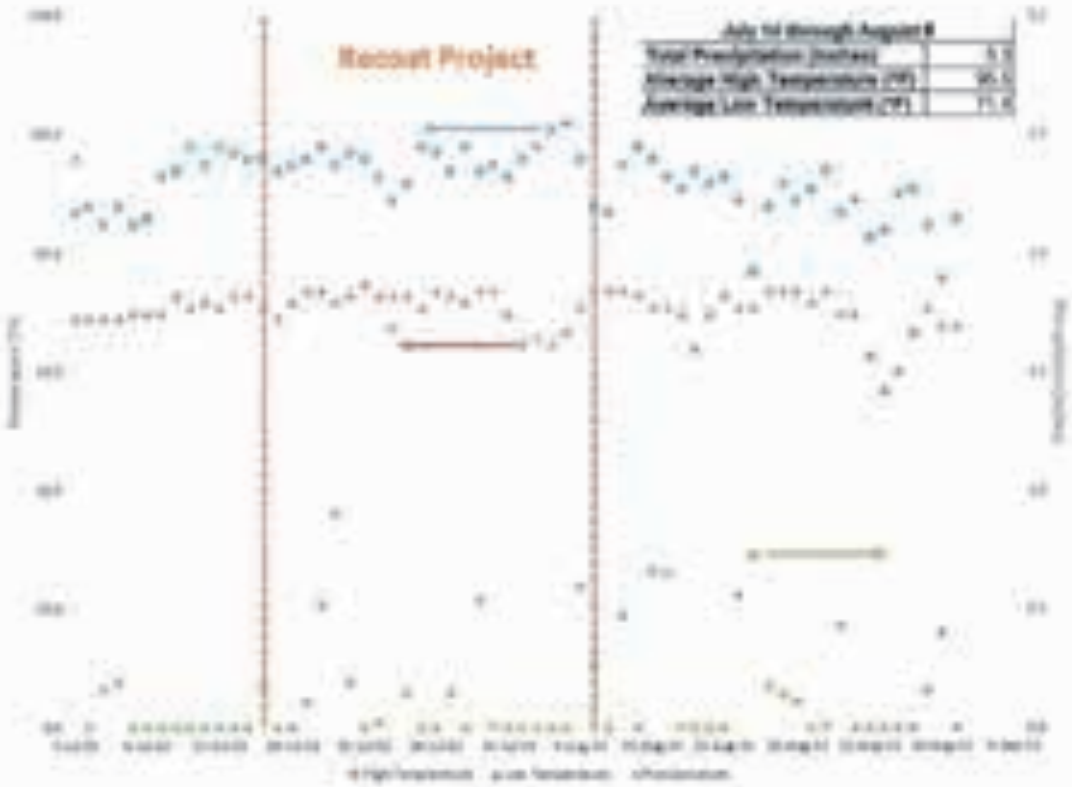
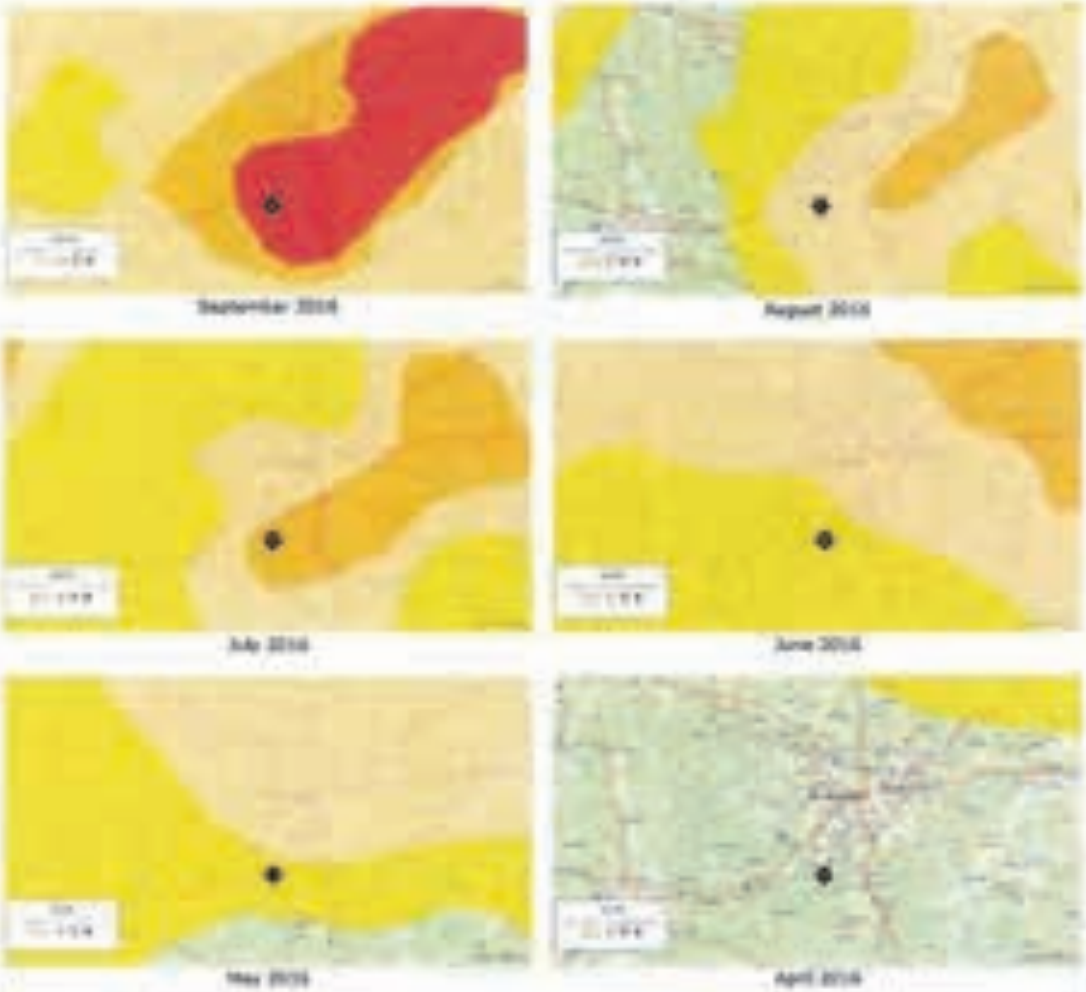


Figure 7. Plot of temperature and precipitation versus date between July 1, 2015 and August 31, 2015 for Helena, Alabama.[27] The total precipitation and averages high / low temperatures are shown in a table in the upper right corner for the dates of the recoating project (July 14, 2015 through August 6, 2015) [Ref 24].

27 http://www.uaclimatedata.com/climate/helena/alabama/united-states/usal0812/2015/8



Category	Description	Possible Impacts	Objective Drought Indicator Score (Percentiles)
D0	Abnormally Dry	Drought not imminent: • Some crops/pastures showing planting, growth or crop or pasture Emerging out of drought: • Some lingering water deficits • Pastures or crops not fully recovered	[illegible]
D1	Moderate Drought	• Some drought to crops/pastures • Streams, reservoirs, or wells low; some water shortages developing or imminent • Winter wheat seeding/emergence impaired	[illegible]
D2	Severe Drought	• Crop or pasture losses likely • Water shortages common • Water restrictions imposed	[illegible]
D3	Extreme Drought	• Major crop/pasture losses • Widespread water shortages or restrictions	[illegible]
D4	Exceptional Drought	• Widespread crop/pasture losses • Shortages of water in reservoirs, streams, and wells creating water emergencies	[illegible]

Figure 8: Maps from the NOAA website showing the drought conditions near Helena, Alabama between April 2016 and September 2016[illegible] and a table summarizing drought severity classifications.[illegible] Red arrow indicates the approximate failure location.

Figure 9. Donut plot summarizing the type of features identified on Joint 266940 and 266950 of Line 01 for ILIs, except for the 1996 run [Ref 23]. Note that the failure location is 2.4 feet D/S of GW 266950 of Joint 266950.

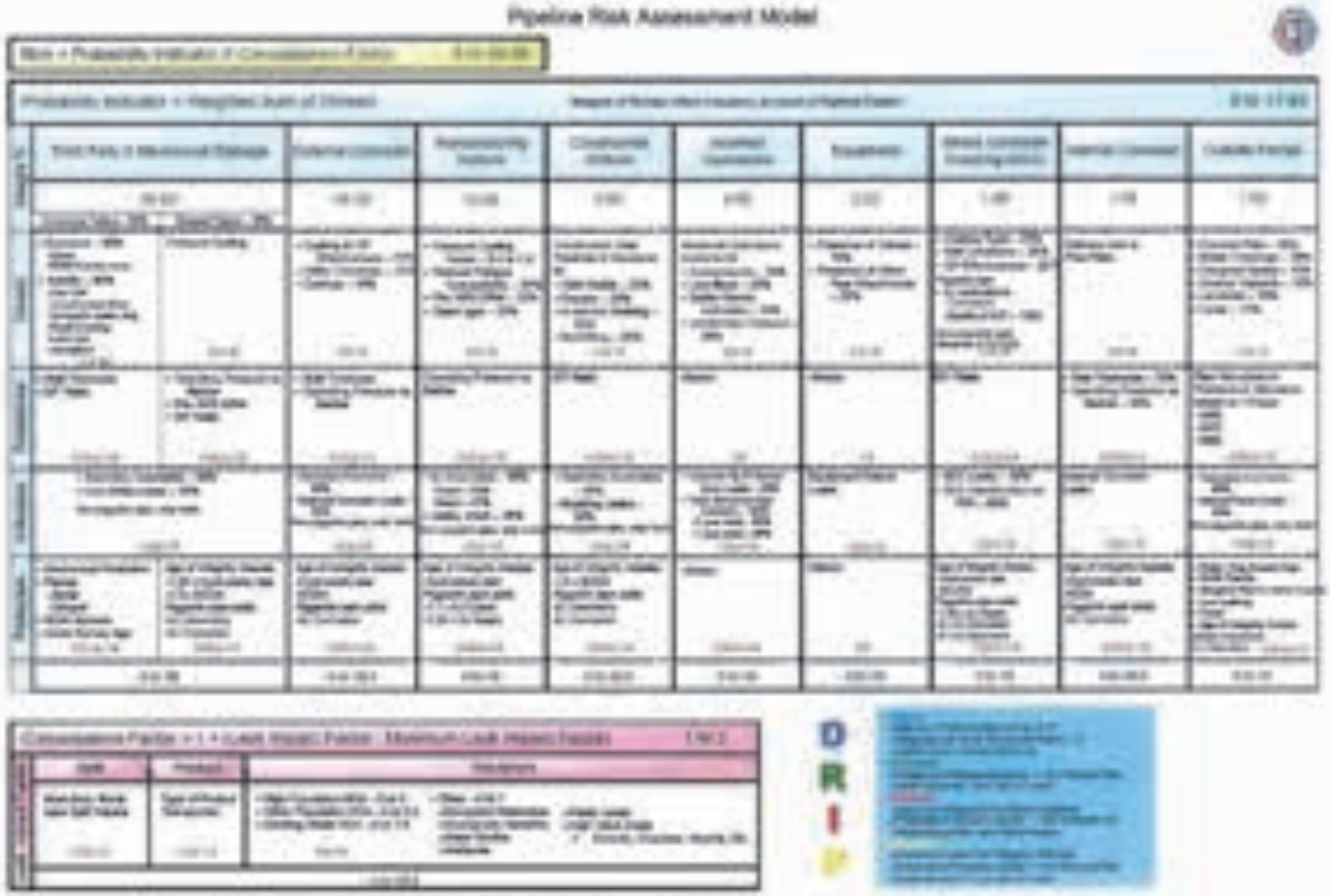


Figure 10. Summary of the Pipeline Risk Assessment Model used by Colonial at the time of the incident (Ref 19).

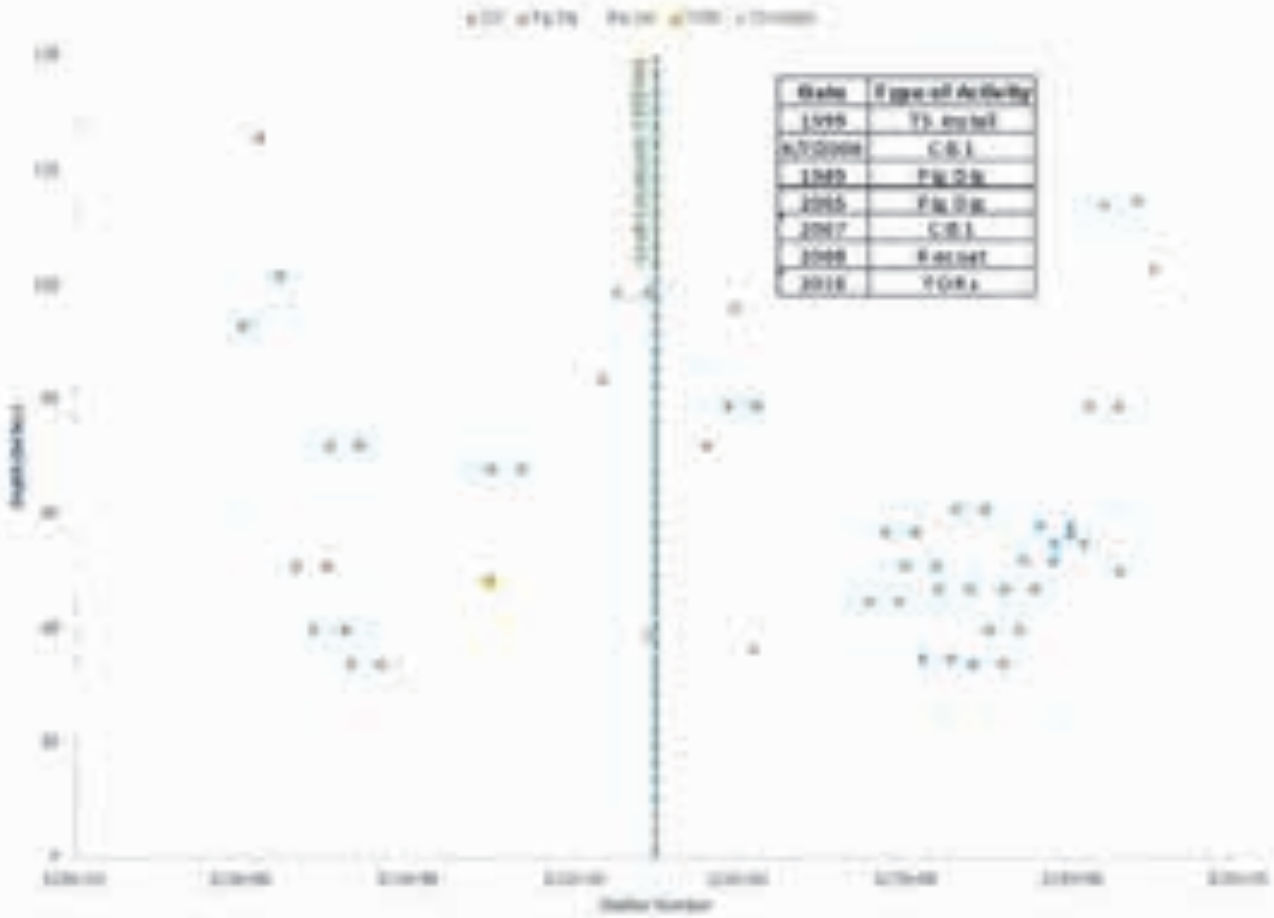


Figure 11. Plot showing the reported depth of cover in inches versus Station for DOC1, Pig Digs, Recoat, TOR install, and TS Install from a variety of years [Ref 18]. The failure location is at Station 5155+04[3] and is depicted by a green dashed line.

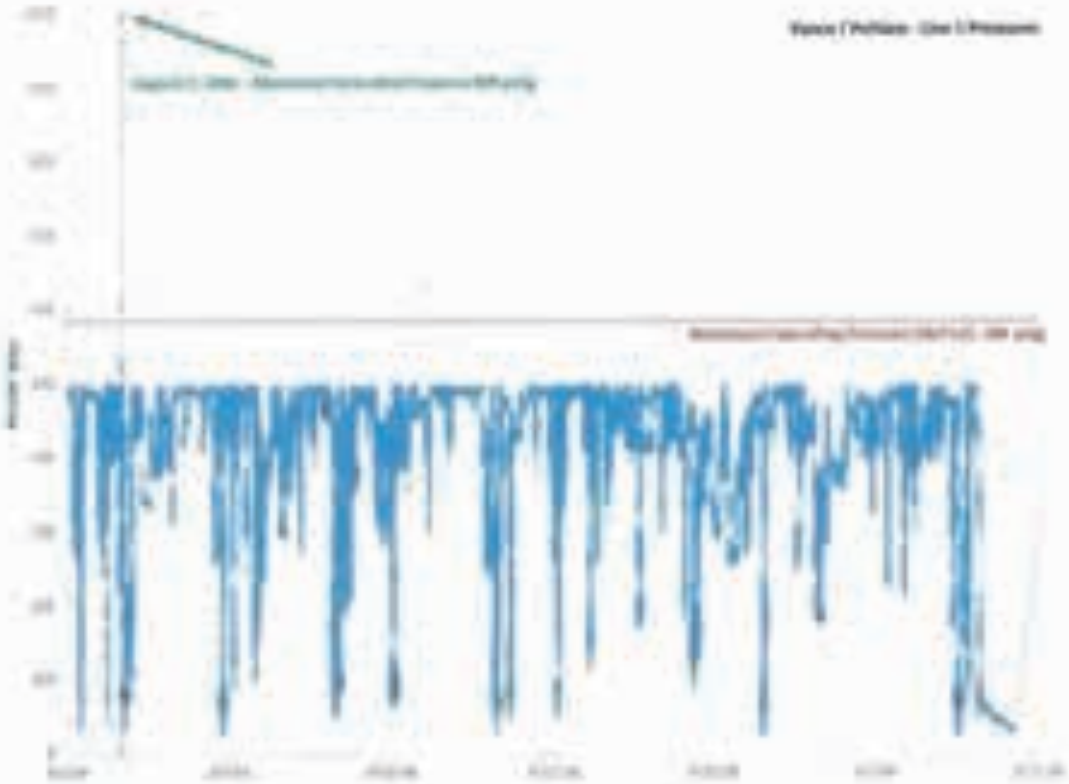


Figure 12. Plot showing the pressure data from the Vance to Pelham Segment of Line 01 in psig between August 1, 2016 and September 12, 2016 [Ref 34]. Anomalous over pressurization readings due to equipment calibration are noted on August 3, 2016.[28]

[28] The maximum recorded pressure on August 3, 2016, was 999 psig, which corresponds to 123% of SMYS. As reported by Colonial, this pressure excursion was the result of equipment calibration and not representative of actual line pressures [Ref 3]. No other pressure excursions were noted.

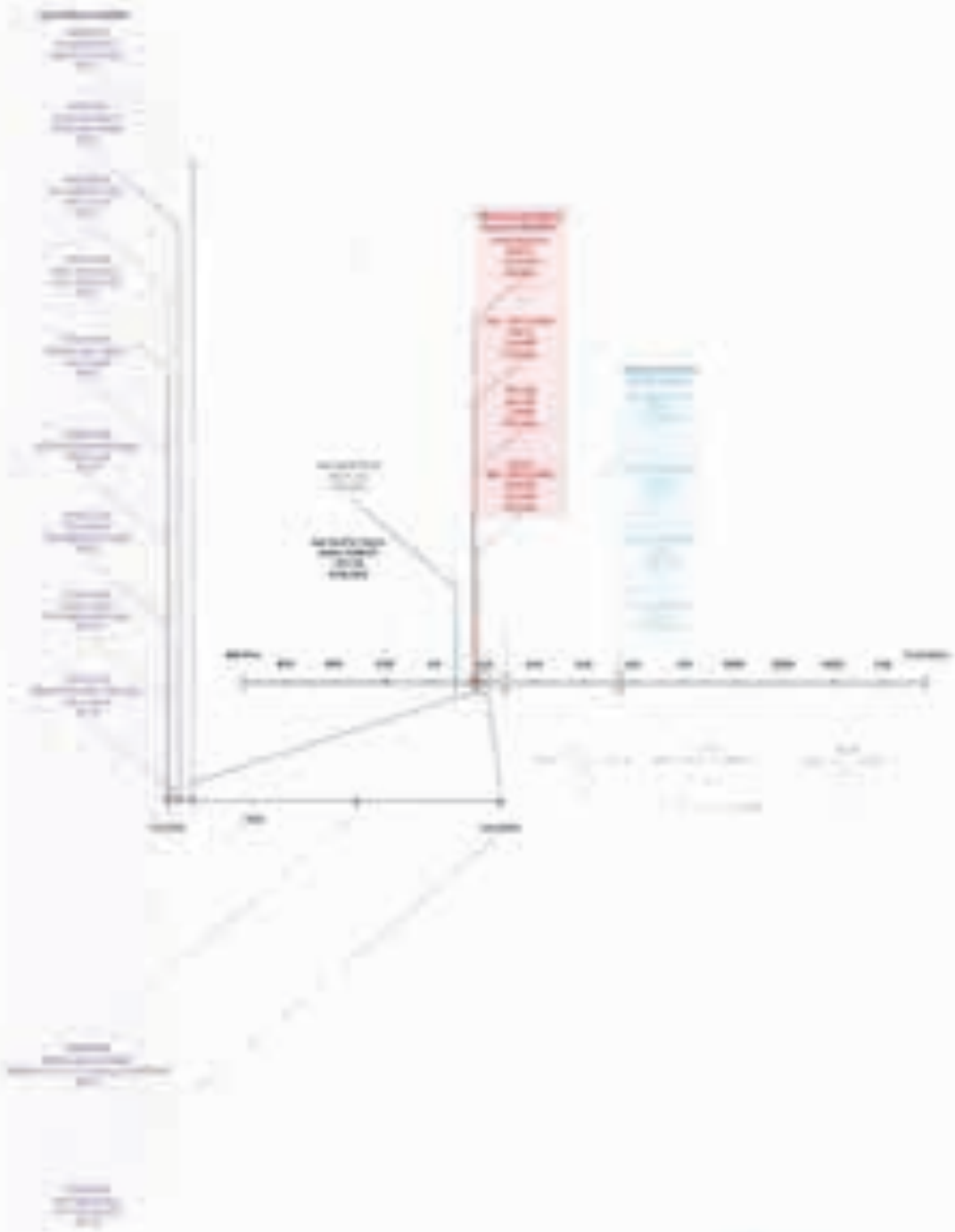


Figure 13. Timeline showing key events for Line 01 from August 8, 2016 to November 13, 2016. The timeline includes dates for (1) control room activities (purple triangles), (2) leak discovery and calls to report (red diamonds), (3) activities to retrieve the failure location (light blue shaded triangles), and (4) supplemental analyses (light yellow rectangle). Dates for the last rectifier survey (dark gray 1) and the last aerial patrol (green line) are also shown. All times are shown as CDT.

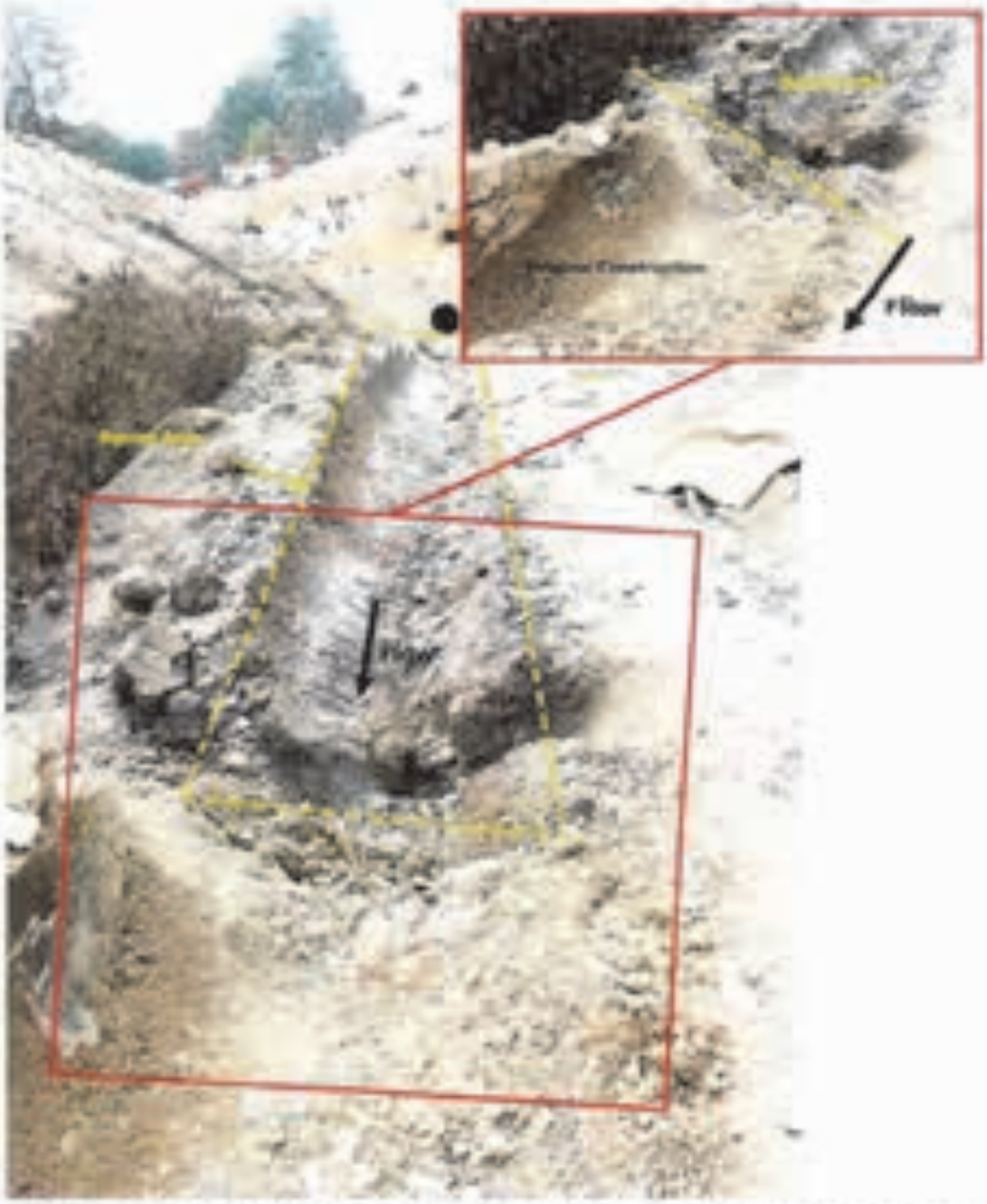


Figure 14. Photographs of the failure site showing the ditch line after removal of the excavated portion of Line 01. The transition between the spil from the 2013 recoating project and original construction is noted.

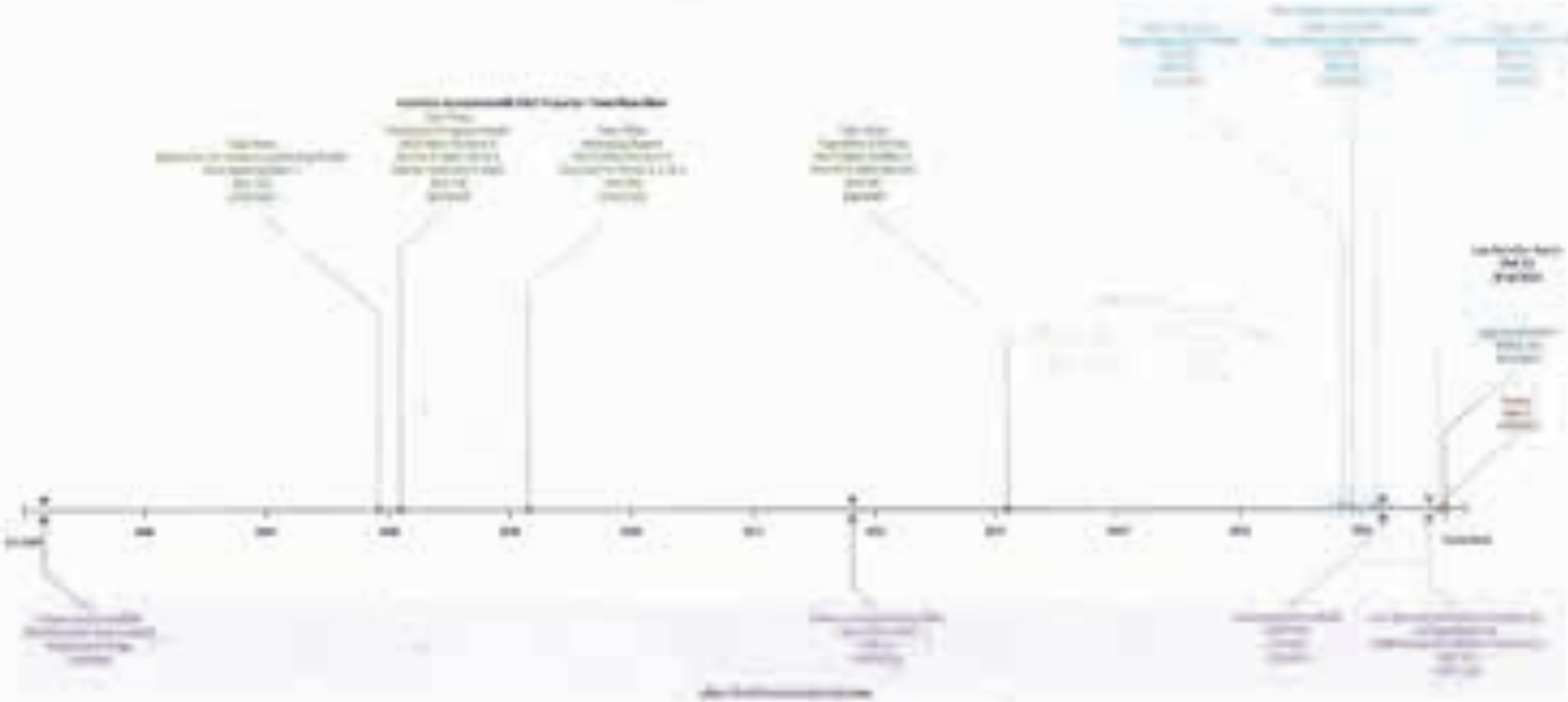


Figure 13. Timeline showing third party activities near Line 6b from January 1, 2003 to November 12, 2014. The timeline includes dates for (1) activities at the Twin Rivers mine on the property currently owned by VCLT (dark green diamonds), (2) logging activities ( ), (3) other third party activities (purple double triangles), and (4) other events observed during the ACMs (blue triangles). Dates for the incident (red diamond), the last rectifier survey (dark gray), and the last aerial patrol (green line) are also shown.

Figure 16. Map showing the location of the Aerial Markers 578, 579, and AM 580 (purple markers) with their corresponding Station Numbers.[6, 7] The area of the recoating project in 2015(purple line) and the failure location (red arrow).

June 14, 2008

September 4, 2010

August 26, 2011

September 22, 2012

December 17, 2013

January 5, 2015

Date	Description
June 14, 2008	Mining and logging activities have not been started. Ponds 1, 2, and 3 have not been constructed.
September 4, 2010	Mining and / or logging activity south of ROW. Ponds 1, 2, and 3 have been constructed.
August 26, 2011	Additional mining and / or logging activity south of ROW.
September 22, 2012	Evidence of vegetation regrowth in areas where mining and / or logging have taken place.
December 17, 2013	Evidence of logging activities north of the ROW.
January 5, 2015	No evidence of an appreciable change in surrounding area after December 17, 2013.

Figure 17. Maps showing changes in the surrounding area adjacent to the pipeline due to logging and mining activities. The locations of Line 01 (red line), the repaired area from 2013 project (purple line), the failure location (red arrow), the (b)(7)(F) and (b)(7)(F) in-place cut locations (red markers with diamond and star, respectively), the (b)(7)(F) and (b)(7)(F) Shoppes (orange markers with diamond and star, respectively), the locations of Ponds 1, 2, and 3 (light blue marker), the locations of well pads (light green markers), and the locations for mining (red areas on the map) and logging (red area on the map) are shown.[4]

Figure 18. Map showing the location of the aerial markers AM 579 and AM 580.[1] The locations for Line 01 ([redacted] line), the 2015 recoating area (purple line), the failure location (red arrow), the U/S and D/S by-pass cut locations ([redacted] markers with diamond and star, respectively), the U/S and D/S Stopples (light red markers with diamond and star, respectively), and the locations of Ponds 1, 2, and 3 (light blue marker) are shown.[1]

Figure 19. Map showing the locations of the three most recent natural seismic events near the failure location.[21, 22] These seismic events were associated with earthquakes.

Figure 20. Comparison of Laser Scan of Wrinkled Pipe Surface (Green) to FEA Model Prediction (Blue) aligned to Girth Weld 266950.

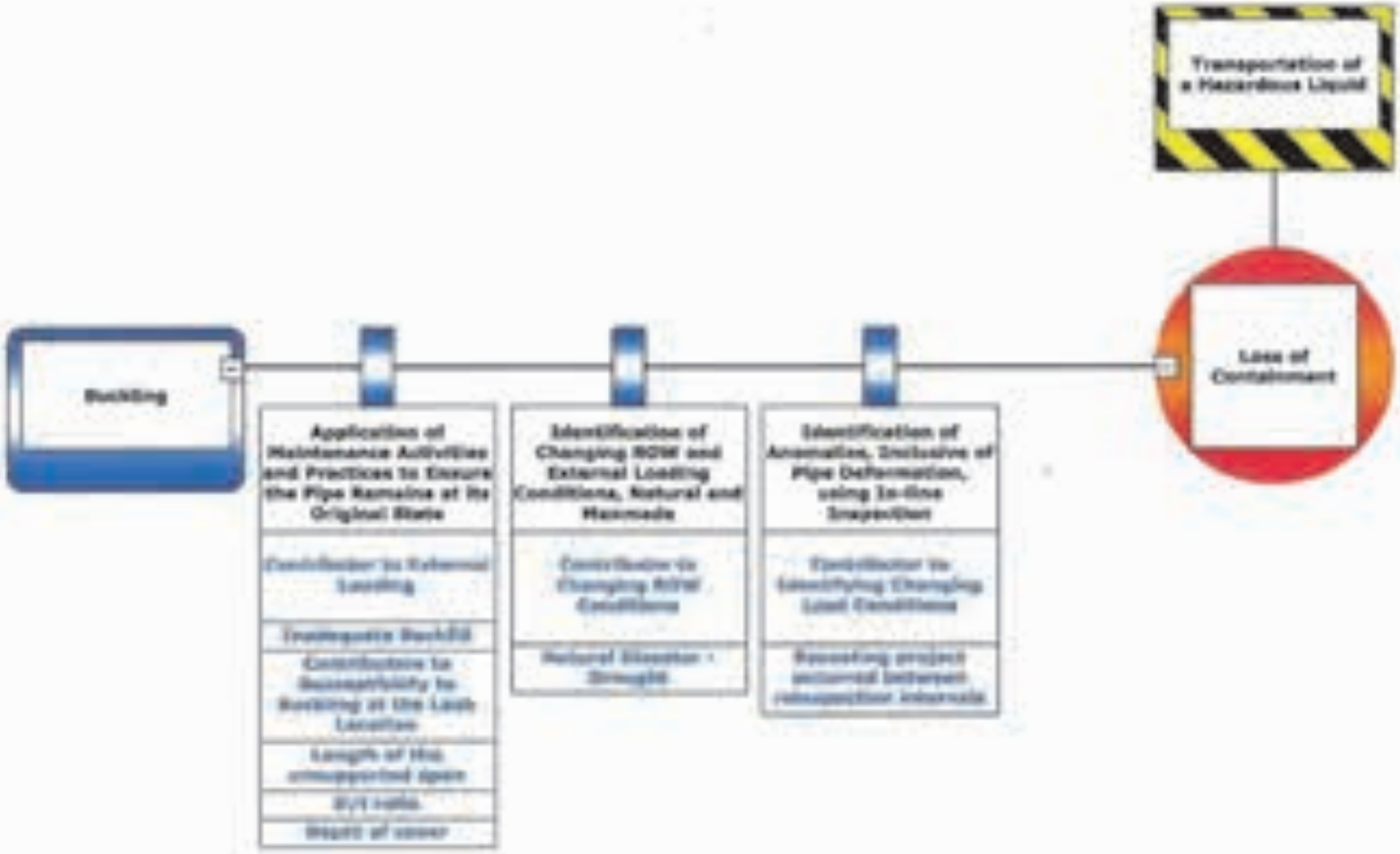


Figure 21. BSCAT™ diagram of the CR-91 Incident.

APPENDIX A

References

The following is a list of references that were used for the RCFA. The reference numbers listed below are used throughout this report to identify the source of information.

Reference Number	Description	DNV GL Reference	Document Name
Incident Related Documents			
1.	Amended CAO		20016N0014_Amended_CAO_10132016.pdf
2.	CAO		20016N0014_CAO_09162016.pdf
3.	Response to PHMSA	DNV000057	PHMSA information request response- Draft to PHMSA - FINAL 10.01.2016.pdf
4.	Response Website		https://helena.colonialresponse.com/
5.	DNV GL Site Information		Photographs: IMG_0001.jpg to IMG_0286.jpg; Video: VIRB0001.MP4 to VIRB0013.MP4
			F208 – Line 01 Field Notes (Privileged and Confidential) September 29 to October 1 2016.pdf
6.	Response to DNV GL	DNV000417	DNV Data Request - Colonial Responses.docx
		DNV000517	DNV Updated Request List - Privileged and Confidential.msg
7.	Hazardous Liquid Release Documents	DNV000551A	CR91 Volume Calculations.msg
		DNV000581	HazLiquid_HazLiquid_2016_09_09.pdf
8.	NRC Call Log		Current.xls (from http://nrc.uscg.mil/)
9.	Pressure at Location of Failure	DNV000006	Max Operating Pressure at the leak site (MP 570) line 01. 9-13-16.pdf
Historical Documents			
10.	Mining Permits	DNV000543	12-03-07 Alabama Surface Mining Comm'n Notice of Filing for Permit.pdf
		DNV000544	2-11-08 Alabama Surface Mining Comm'n Permit.pdf
Metallurgical Investigation			
11.	Metallurgical Investigation Results	DNV000430	300.01N_MetallurgicalEvaluationLineC1-CR-91 Event_10Nov2016.pdf
		DNV000442	Meeting Notes - Review of Mech and Metallurgical Testing v2(09 November 2016).pdf
		DNV000466	Meeting Notes - Review of Mech and Metallurgical testing v1 (11 November 2016).pdf
		DNV000551	Combined Flattened Strap Tension.xls
		DNV000562	Combined Round Tension_11.xls
12.	Scope of Metallurgical Investigation	DNV000083	Data Collection Plan - Metallurgical inspection - FINAL 09.30.2016.pdf
		DNV000113	20016N0014_region (Metallurgy Approval)_10122016.pdf
		DNV000105	Metallurgical Evaluation Plan, - Draftpdf.pdf
		DNV000118	Metallurgical Evaluation Plan – Draft to PHMSA.pdf
13.	Chain of Custody	DNV000081	Chain-of-Custody – Pipe shipment to BMT.pdf
		DNV000114	Chain-of-Custody – BMT Receipt in Ottawa.pdf
14.	Scanning	DNV000445	Report Scan after cut weld.pdf
		DNV000446	Report Scan after cut wrinkle.pdf
		DNV000447	Report Scan before cut weld.pdf
		DNV000448	Report Scan before cut wrinkle.pdf
15.	Photos As-Received at BMT	DNV000373	Photo of Pipe as received in crate - BMT.JPG
		DNV000374	Pipe Arrival at BMT.JPG
		DNV000375	Pipe Crate in BMT Warehouse – Photo 2.JPG

		DNV000376	Pipe Crate in warehouse at BMT.JPG
Reference Number	**Description**	**DNV GL DocDoc**	**Document Name**
16.	Field Photographs by BMT	DNV000117	IMG_0833.JPG
		DNV000118 to DNV000373	IMG_8187.JPG to IMG_8176.JPG IMG_8180.JPG to IMG_8206.JPG; IMG_8241.JPG to IMG_8246.JPG; IMG_8248.JPG to IMG_8253.JPG; IMG_8255 to IMG_8257.JPG; IMG_8258 to IMG_8308.JPG; IMG_8312.JPG; IMG_8314.JPG to IMG_8320.JPG; IMG_8322.JPG to IMG_8330.JPG; IMG_8335.JPG to IMG_8339.JPG; IMG_8341.JPG to IMG_8352.JPG; IMG_8354.JPG to IMG_8362.JPG; IMG_8364.JPG to IMG_8382.JPG; IMG_8384.JPG to IMG_8444.JPG; IMG_8446.JPG to IMG_8460.JPG; IMG_8462.JPG to IMG_8463.JPG; IMG_8465.JPG; IMG_8468.JPG to IMG_8470.JPG; IMG_8474.jpg to IMG_8514.JPG
		DNV000377	untitled.png
17.	Field Photographs and Video by Colonial	DNV000530	00005C3 Second cut to remove the 20 feet containing the buckle's
		DNV000531	00008C3 Loading the pipe on the truck.MTS
		DNV000532	00025 close-up of the buckle.MTS
		DNV000533	00026 close-up of the buckle.MTS
		DNV000534	IMG_0317 Buckle.JPG
		DNV000535	IMG_0318 lift strap.JPG
		DNV000536	MVI_0029_Air mover operating.MP4
		DNV000537	MVI_0030_PHMSA and Engineers uncovering the pipe.MP4
		DNV000538	MVI_0031_shot_of_the_buckle.MP4
		DNV000539	MVI_0032_adding dots for 3d modelling.MP4
		DNV000540	MVI_0033_Start_of_the_3d_modelling.MP4
		DNV000449	00000C3 Starting the cut.MTS
Integrity-Related Documents			
18.	Depth of Cover Data	DNV000556	Depth of Cover Data.xlsx
19.	Risk Assessment		Pipeline Risk Assessment Model - Chart.vsd
			Pipeline_RAM_Data_Dictionary_on_Backfill.pdf
			PRAMChart.pdf
			Privileged and Confidential - Colonial CR-91 Event RCFA - Correction to Prior Information.msg
20.	Alignment Sheets	DNV000046	Alignment Sheet Station 5143+40.pdf
		DNV000387	5-331.113.pdf
		DNV000388	5-331.114.pdf
		DNV000389	5-331.1169.pdf
		DNV000390	5AL050.pdf
		DNV000391	5AL051 -(2).pdf
		DNV000392	5AL051.pdf
21.	System Map	DNV000478	Line 01 Map.pdf

Reference Number	Description	DNV GL BegDoc	Document Name
22.	Hydrotests	DNV000406	HC_01_0402_5173+76-5767+01_07-15-99.pdf
		DNV000408	Hydrotests from Sta 5102+38 to Sta 5207+96.xls
		DNV000407	Hydrotest 000001-4420.pdf
		DNV000409	Report_211781.pdf
23.	In-line Inspection Documents	DNV000052	CR-91 PHMSA Anomaly & Recoat Map.pdf
		DNV000079	Anomaly Map (CR).pdf
		DNV000080	Anomaly Mitigations - Stopples (2009 & 2014 IU Runs – CR).pdf
		DNV000056	MFL Tool Dent Locations - Prior IU Runs (CR).pdf
		DNV000084	Line 01 Collins to Pelham IU Tally Sheet - Between Stopples.xlsx
		DNV000413	LN12014Combinedmfl.xlsx
		DNV000545	2014 ODC for Stopple 1 and 2.pdf
24.	Pipe Inspection Reports	DNV000058	Pipe Inspection Report.pdf
		DNV000096	010401000051/3040899PC.pdf
25.	Subcontractor QQ Report - Recoat Project	DNV000550	Brian Keith Milligan QQReport_37877185.pdf
26.	Dig Reports	DNV000443	MT-COLPIPE-HELENA-DIG108-7-16-15.xls
		DNV000444	MT-COLPIPE-HELENA-DIG108-7-17-15.xls
27.	Procedures / Manuals	DNV000110	Butt Weld Procedures 812-813.pdf
		DNV000111	Welding Procedure.pdf
		DNV000382	Maintenance Procedures Referenced in Replacement Plan (2).pdf
		DNV000383	Manuals Referenced in Replace Plan.pdf
		DNV000431	CM-102.pdf
		DNV000540	EOP-02-401 – Leak Rev. 9.doc
28.	Risk Matrix	DNV000558	Section 3 – Baseline Assessment - 2016 Final.pdf
		DNV000559	Pipeline Risk Assessment Model - Chart.vsd
29.	Break and Leak Report	DNV000546	7-19801118-1100-AL.pdf
30.	Station Flow Diagrams	DNV000541	0421(PLI)-Flow_Diagram.pdf
		DNV000542	0414(VAB)-Flow_Diagram.pdf
Cathodic Protection Records			
31.	CIS Surveys	DNV000049	CIS Prove Up Survey Line 01_Loc 401_ID 200 (Confidential).pdf
		DNV000050	CIS Prove Up Survey Line 01_Loc 401_ID 200 GRAPH (Confidential).pdf
		DNV000051	CIS-401 Line 1-514490-517521 Confidential).pdf
		DNV000519	Rectifier Output History Report Line 01_Loc 401_2013-2016 (CR).pdf
		DNV000047	Annual Test Point Survey Records_ Line 01_Loc 401_2013-2016 (CR).pdf
Leak Detection Records			
32.	Aerial Reports	DNV000519	Hwy 82 to Pelham Aerial.pdf
		DNV000385	AOR Summary - Line 01 Near MP 179 (Confidential).pdf

Reference Number	Description	DNV GL RegDoc	Document Name
Control Center Documentation			
33.	System Pressure Settings	DNV000077	Vance1.pdf
		DNV000061	Alternate Relief Setting Documentation (Confidential).pdf
		DNV000062	Line 01 Relief (Vance & Pelham highlighted).pdf
		DNV000063	Line 01 Relief Pressure Settings 9-15-16.pdf
		DNV000065	Line1.pdf
		DNV000066	line1501PL.pdf
		DNV000067	Pelham Delivery Mainline Pressures – Averages 30-60-90.pdf
		DNV000068	Pelham Discharge Pressures – Averages 30-60-90.pdf
		DNV000069	Pelham Junction Mainline Pressures – Averages 30-60-90.pdf
		DNV000070	Pelham Suction Pressures – Averages 30-60-90.pdf.pdf
		DNV000071	Pelham1.pdf
		DNV000072	Pressure Data Requested by Michael Khayata 9-15-16.pdf
		DNV000073	Pressure Test Schematic.pdf
34.	Operations: Pressure and Volume	DNV000075	Vance Discharge Pressures – Averages 30-60-90.pdf
			Line 1 product volumes 2015-2016 to date – BUSINESS CONFIDENTIAL.XLSX
		DNV000076	Vance Suction Pressures – Averages 30-60-90.pdf
		DNV000084	Line 01 Vance_Pelham 42 day pressures.pdf
35.	Procedures / Manuals	DNV000547	ACP-CC-001 – Suspected Leak Rev. 9.doc
		DNV000548	ACP-CC-002 – Meter Imbalance Rev. 4.doc
36.	Event Report	DNV000549	ACP_EOP Listing for PLL VAB, STB - 01012013 thru 09252016.xlsx
		DNV000055	Incident Event Log 2016-09-15 1126.pdf
37.	SCADA	DNV000074	SCADA Vance_Pelham 30 day pressures prior to 20160909 (002).pdf
Design and Construction Documents			
38.	MTRs	DNV000087	AFE 1 PO 484 National Tube MTR 1.pdf
		DNV000088	AFE 1 PO 484 National Tube MTR 2.pdf
		DNV000089	AFE 1 PO 484 National Tube MTR 3.pdf
		DNV000090	AFE 1 PO 484 National Tube MTR 4.pdf
39.	Hydrology Report	DNV000404	Twin Pines Hydrology-Geotech study P-3901 Basins 022 022A.pdf

Reference Number	Description	DNV GL RegDoc	Document Name
40.	Original Construction Documents	DNVG00420	Material Recap.pdf
			Line 1 LOC 401 As-Built Profile Survey From Sta. 5102+36 to Sta. 5207+96.pdf
			Line 1 LOC 401 As-Built Survey From Sta. 5102+36 to Sta. 5207+96.pdf
		DNVG00421	Supplemental Inventory Report.pdf
		DNVG00415	AFE 1 LOC 401.pdf
		DNVG00393	Backfilling Specifications_Attachments.pdf
		DNVG00394	Backfilling Specifications.pdf
		DNVG00395	Bending, Laying and Lowering in Specifications.pdf
		DNVG00396	Ditch Specifications.pdf
		DNVG00397	Excavation Specifications.pdf
Bypass and Replacement Plan Documentation			
41.	Restart Plan	DNVG00064	Line 01 CR91 Restart Plan - 11-15-2016 REVISED FINAL.pdf
42.	Bypass Plan	DNVG00067	Memo - Field Report on Pipe Removal and Recovery of Bypass Segment - CR-91 Event (FINAL).pdf
		DNVG00060	Stopple reports (2).pdf
		DNVG00091	Bypass pipe Elevation view .pdf
		DNVG00092	Estimate Stress Strain On Unsupported Pipe.pdf
		DNVG00093	Space-Time Wave Train - 1.pdf
		DNVG00094	Line 01 CR91 Bypass Plan - Rev 3 09212016.pdf
		DNVG00095	Line 01 CR91 Bypass Plan – Rev 4 09212016.pdf
		DNVG00096	Line 01 CR91 Bypass Plan – Rev 5 09212016.pdf
		DNVG00097	Line 01 CR91 Bypass Plan - Rev-2.pdf
		DNVG00098	Line 01 CR91 Relocation Plan Inc Attachments.pdf
		DNVG00099	Excavation Plan - Response To PHMSA Comments with Attachments.pdf
		DNVG00100	Excavation_Plan_Map.pdf
		DNVG00101	Leak Site Excavation Plan - CR-91 Event Rev 1.pdf
		DNVG00102	PELHAM CR91 DAILY MONITORING CHECKLIST SHEET.pdf
		DNVG00104	Drain Up Plan - Line 01 Repair – CR 91 Event -FINAL .pdf
		DNVG00106	Remote safety plan.pdf
		DNVG00107	Storm Water Management Plan.pdf
		DNVG00108	Water Displacement Plan - Line 01 Repair - CR-91 Event DRAFT.pdf
		DNVG00109	Water Management Plan for bypass piping rev 10-1-16.pdf
		DNVG00178	Appendix H -Project Schedule - Draft-rev1.pdf
		DNVG00179	Engineering Standards Referenced in Replacement Plan (3).pdf
		DNVG00181	Line 01 CR91 Replacement Plan.pdf
		DNVG00184	Material & Equipment Specifications Referenced in Replacement Plan (1).pdf

Reference Number	Description	DNV GL Reg/Doc	Document Name
43.	Certifications and Qualifications for Bypass	DNVGL000001	Daniel McLain EYE.pdf
		DNVGL000002	McLain Daniel.pdf
		DNVGL000003	McLain DQ & 26.16.pdf
		DNVGL000004	Chase McNair DQ.pdf
		DNVGL000005	McNair William Chase.pdf
		DNVGL000006	William McNair EYE.pdf
		DNVGL000007	Brandon Walker - 522.pdf
		DNVGL000008	Christopher S Draper - 536.pdf
		DNVGL000009	Cora Clark - 382.pdf
		DNVGL000010	Daniel L. Hammer - 486.pdf
		DNVGL000011	Dillon Bible - 596.pdf
		DNVGL000012	Fraiya Wyatan. - 340.pdf
		DNVGL000013	Jacob Fontenot - 531.pdf
		DNVGL000014	Jason J McCrary - 507.pdf
		DNVGL000015	Jerimy Bryant - 381.pdf
		DNVGL000016	Joey Hollis - MM.pdf
		DNVGL000017	Jose Contreras - 504.pdf
		DNVGL000018	Kyrus Clark - 505.pdf
		DNVGL000019	Marty McMahan - 211.pdf
		DNVGL000020	Wade Cauthen - 537.pdf
		DNVGL000021	Wesley Carter - 472.pdf
		DNVGL000022	Windel Lewis II - 383.pdf
		DNVGL000023	Brandon Walker Welding Cert(3012016.pdf
		DNVGL000024	Christopher S. Draper_10-29-13.pdf
		DNVGL000025	Daniel Lamar Hammer CPL 11292012.pdf
		DNVGL000026	Daniel Lamar Hammer.pdf
		DNVGL000027	Dillon Bible_1-5-16.pdf
		DNVGL000028	Fraiya A. Wyatan 10-29-2009.pdf
		DNVGL000029	Fraiya Aaron Wyatan 04-25-2005.pdf
		DNVGL000030	Jacob Fontenot_11-21-2013.pdf
		DNVGL000031	Jacob Fontenot_11-7-2013.pdf
		DNVGL000032	Jacob Fontenot_4-12-14.pdf
		DNVGL000033	Jason J. McCrary_10-29-13.pdf
		DNVGL000034	Jerimy Bryant_3-7-14.pdf
		DNVGL000035	Joey Hollis_1-5-2016.pdf
		DNVGL000036	Jose Contreras.pdf
		DNVGL000037	Kyrus Clark 1-5-2016.pdf
		DNVGL000038	Lee Clark 10-03-2007.pdf
		DNVGL000039	Marty McMahan 02-01-2007.pdf
		DNVGL000040	Marty McMahan_2-7-14.pdf
		DNVGL000041	Wade Cauthen_2-20-14.pdf
		DNVGL000042	Wade Cauthen_2-21-14.pdf
		DNVGL000043	Wesley B. Carter Sr 10-2011.pdf
		DNVGL000044	Wesley Carter CPL 11292012.pdf
		DNVGL000045	Windel Lewis II 1-5-2016.pdf

Reference Number	Description	DNV GL Reg.Doc	Document Name
44.	Photographs and Video of Bypass	DNV000450	IMG_0231_Bypass cutout section (coating).JPG
		DNV000451	IMG_0232 Bypass cutout section (coating).JPG
		DNV000452	IMG_0233 Bypass cutout section.JPG
		DNV000453	IMG_0234 Bypass cutout section.JPG
		DNV000454	IMG_0260 Bypass cutout section (coating).JPG
		DNV000455	IMG_0261 Bypass cutout section (coating).JPG
		DNV000456	MVI_0003_Cutting_Upstream_side_for_the_bypass.MP4
		DNV000457	MVI_0004_Cutting_the_pipe_for_the_bypass.MP4
		DNV000458	MVI_0004_Cutting_Upstream_side_for_the_bypass.MP4
		DNV000459	MVI_0005_Cutting_the_pipe_for_the_bypass.MP4
		DNV000460	MVI_0005_Observing_the_ROW_above_the_suspected_damage.MP4
		DNV000461	MVI_0006_Cutting_the_pipe_for_the_bypass.MP4
		DNV000462	MVI_0006_Sealing_the_upstream_cut.MP4
		DNV000463	MVI_0007_Cutting_the_pipe_for_the_bypass.MP4
		DNV000464	MVI_0008_Cutting_the_pipe_for_the_bypass.MP4
		DNV000465	MVI_0009_Cutting_the_pipe_for_the_bypass.MP4
		DNV000466	MVI_0011_Cutting_the_pipe_for_the_bypass.MP4
		DNV000467	00001 Crack in the soil.MTS
		DNV000468	00002 Stopped digging due to high VOCs.MTS
		DNV000469	00003 Stopped digging due to high VOCs.MTS
		DNV000470	00004 Stopped digging due to high VOCs.MTS
		DNV000471	00008 Digging along the pipe looking down the trench.MTS
		DNV000472	00009 looking at the rock shield.MTS
		DNV000473	00010 Moving the mats.MTS
		DNV000474	00011Uncovering the free rock shield.MTS
		DNV000475	00012 Tape failed allowing the rock shield to slip off.MTS
		DNV000476	00013 Tape failed allowing the rock shield to slip off.MTS
		DNV000477	00014 Continue the digging.MTS
		DNV000478	00015Continue the digging.MTS
		DNV000479	00016 Digging up to the end of the recoated area.MTS
		DNV000480	00017 Digging up to the end of the recoated area.MTS
		DNV000481	IMG_0008 Image of the released rock shield.JPG
		DNV000482	IMG_0009 Image of the released rock shield.JPG
		DNV000483	IMG_0010 Image of the released rock shield.JPG
		DNV000484	IMG_0011 Image of the released rock shield.JPG
		DNV000485	IMG_0012 Image of the released rock shield.JPG
		DNV000486	IMG_0284 excavation location with GPS.JPG
		DNV000487	IMG_0285 excavation location with GPS.JPG
		DNV000488	IMG_0286 excavation location with GPS.JPG
		DNV000489	IMG_0287 excavation location with GPS.JPG
		DNV000490	IMG_0288 excavation location with GPS.JPG
		DNV000491	IMG_0289 excavation location with GPS.JPG
		DNV000492	IMG_0290 excavation location with GPS.JPG
		DNV000493	IMG_0291 excavation location with GPS.JPG
		DNV000494	IMG_0292 Measuring the depth of the ditch.JPG
		DNV000495	IMG_0293 Measuring the depth of the ditch.JPG
		DNV000496	IMG_0294 excavation location with GPS.JPG
		DNV000497	IMG_0295 excavation location with GPS.JPG
		DNV000498	IMG_0296 excavation location with GPS.JPG
		DNV000499	IMG_0297 excavation location with GPS.JPG

44 (cont'd)	Photographs and Video of Bypass	DNV000500	IMG_0310 excavation location with GPS.JPG
		DNV000501	IMG_0311 excavation location with GPS.JPG
		DNV000502	IMG_0312 Crack in the side of the excavation wall.JPG
		DNV000503	IMG_0313 excavation location with GPS.JPG
		DNV000504	IMG_0314 excavation location with GPS.JPG
		DNV000505	IMG_0315 excavation location with GPS.JPG
		DNV000506	IMG_0316 excavation location with GPS.JPG
		DNV000507	MVI_0017_beginning_of_the_digging_moving-upstream.MP4
		DNV000508	MVI_0018_digging_moving-upstream.MP4
		DNV000509	MVI_0024_Digging_North_toward_Valve_pull_the_repair.MP4
		DNV000510	MVI_0025_Rock shield has fallen away_Duct tape failed.MP4
		DNV000511	000003 Removal of the Trench Box.MTS
		DNV000512	000004 Lifting and transporting the 100 feet of pipe.MTS
		DNV000513	IMG_0258 Looking upstream away from the dig site.JPG
		DNV000514	IMG_0262 Upstream bypass cut.JPG
		DNV000515	IMG_0263 Bypass near the upstream.JPG
		DNV000516	IMG_0264 Bypass Line and hold down sand bags.JPG
		DNV000517	IMG_0265 Bypass Line and hold down sand bags.JPG
		DNV000518	IMG_0266 Bypass Line and hold down sand bags.JPG
		DNV000519	IMG_0267 Rock with a blast hole.JPG
		DNV000520	IMG_0268 Rock with a blast hole from the drainage.JPG
		DNV000521	IMG_0275 Drainage path.JPG
		DNV000522	IMG_0276 Looking upstream from the drainage path.JPG
		DNV000523	IMG_0277 Looking upstream from the drainage path.JPG
		DNV000524	IMG_0278 Looking from South to North at the drainage path.JPG
		DNV000525	IMG_0279 Looking downstream.JPG
		DNV000526	IMG_0280 Looking upstream from the downstream bypass cut.JPG
		DNV000527	IMG_0281 Looking upstream from the downstream bypass cut.JPG
		DNV000528	IMG_0282 Looking upstream from the downstream bypass cut.JPG
		DNV000529	IMG_0283 Upstream cut point with pig launcher installed.JPG
		DNV000529	IMG_0283 Upstream cut point with pig launcher installed.JPG
Geotechnical Assessments			
45.	Geotechnical Assessment - Before Leak Discovery	DNV000112	Geotechnical Assessment, 08.23.16.pdf
46.	Geotechnical Assessment - After Leak Discovery	DNV000432	Geotechnical Sampling Plan_Draft.pdf
		DNV000115	Chain-of-Custody Form - NCHA geotechnical Samples.pdf
		DNV000380	Geotechnical Sampling Plan_Draft Final.docx
		DNV000403	Geotechnical Sampling Plan_Draft Final 10 25 2016.pdf
		DNV000401	CR01 lab results, DRAFT.pdf

Reference Number	Description	DNV GL BegDoc	Document Name
47.	As-found Pipe Profile	DNV000513	CR 91 Leak Site Line 01 10-26-16 with annotations.pdf
		DNV000412	CR 91 Leak Site Line 01 P P (2) 10-26-16.pdf
		DNV000413	Elevation profile - Failure Site Segment.docx
		DNV000424	Leak site 9-29-16.txt
		DNV000425	Leak site 9-30-16.txt
		DNV000562	Leak site 9-29-16.xlsx
		DNV000563	Leak site 9-30-16.xlsx
		DNV000426	Location Elevations - CR-91 Leak Site.xlsx
		DNV000570	CR 91 Leak Site Line 01 P & P 11-21-16.pdf
		DNV000569	RE Privileged and Confidential - CR-91 Event Survey Data and Drawing.msg
48.	Images from Colonial from September 16, 2016	DNV000433	IMG_0976.JPG
		DNV000434	IMG_0977.JPG
		DNV000435	IMG_0978.JPG
		DNV000436	IMG_0979.JPG
		DNV000437	IMG_0980.JPG
		DNV000438	IMG_0981.JPG
		DNV000439	IMG_0982.JPG
		DNV000440	IMG_0983.JPG
		DNV000441	IMG_0984.MOV

ABOUT DNV GL

Driven by our purpose of safeguarding life, property, and the environment, DNV GL enables organizations to advance the safety and sustainability of their business. We provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil and gas, and energy industries. We also provide certification services to customers across a wide range of industries. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping our customers make the world safer, smarter, and greener.

OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date

No. 7000-1 **(DOT)**
19860113

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**

2) Principal business address _____

_____
(city) *(state)* *(ZIP code)*

3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **06** *(day)* **13** *(year)* **1986**

2) Hour: *(24 hour clock)* **1030**

3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **MD** **ANNE ARUNDEL**

4) If offshore, give offshore coordinates _____

5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)

6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

SEE ATTACHED

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station

2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld

○ other *(specify)* _____

3) Year item installed **1949**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify) _____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees

2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 71,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **KEROSENE**

2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL

3) Estimated amount of commodity involved: **106** Barrels spilled **87** Barrels recovered

4) Was there an explosion? ○ yes ● no

5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 6 2) Wall thickness *(inches)* 0.28

3) SMYS *(psi)* 2,960 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,200

7) Pressure at time and location of accident *(psig)* 270

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 8

10) Maximum test pressure *(psig)* 1,810

11) Date of latest test *(month)* 7 *(day)* _____ *(year)* 81

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
● yes ○ no

PART K - ACCOUNT OF ACCIDENT

AT 1030 HOURS ON 6/13/86 A TELEPHONE CALL WAS RECEIVED AT COLONIAL'S DORSEY JCT, MD, FACILITY FROM A CONTRACTOR ADVISING THAT HE HAD JUST RUPTURED A COLONIAL PIPELINE IN A NEW DEVELOPMENT NEAR THE BALTIMORE WASHNGTON INTERNATIONAL AIRPORT(BWI). CONSTRUCTION ACTIVITIES AT THE SITE HAVE BEEN IN PROGRESS FOR MORE THANSIX MONTHS AND THE PIPELINES HAVE BEEN LOCATED AND MARKED BY COLONIAL AT THE REQUEST OF REMOVE SPOIL FRON THE R/W WITH A FRONT-END LOADER WITHOUT GIVING NOTICETO COLONIAL AND MISJUDGED THE DEPTH OF THE PIPELINE CAUSING THE ACCIDENT. THREE PIPELINES ARE LOCATED IN THE R/W. THE 6" DIA. BWI DELIVERY PIPELINE WAS IDLE AT THE TIME AND THE OTHER TWO OPERATING PIPELINES WERE SHUT DOWN AND ISOLATED BECAUSE THE CONTRACTOR REPORTED A GASOLINE SPILL. IT WAS FOUND THAT THE 6" BWI HAD BEEN STRUCK BY AVIATION KEROSINE. THE CONTRACTOR USED HIS MACHINE TO CONSTRUCT AN EARTHEN DIKE AROUND THE LEAK SITE TO CONTAIN THE OIL. COLONIAL EMERGENCY PERSONNEL RECOVERED 87 BBLS. OF THE SPILLED OIL LEAVING A NET LOSS OF 19 BBL. THE ANNE ARUNDEL COUNTY FIRE AND POLICE DEPT. WERE NOTIFIED BY COLONAL AND RESPONDED TO THE SCENE. THE FEDERAL EPA AND MARYLAND DEPT. OF WATER RESOURCES WERE NOTIFIED AND RESPONDED TO THE SITE. A REPAIR CLAMP WAS BOLTED AROUND THE DAMAGED PIPE TO PREVENT ADDITIONAL PRODUCT LEAKAGE UNTIL THE AREA WAS MADE SAFE FOR WELDING. THE REPAIR CLAMP WAS THEN WELDED TO THE PIPE TO SERVE AS A TEMPORARY REPAIRUNTIL THE DAMAGED SECTION OF PIP

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J. S. SORROW, SENIOR ADMINISTRATOR

4042611470
Telephone no. *(including area code)*

Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date

No. 7000-1 **(DOT)** **19870017**

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**

2) Principal business address

(city) *(state)* *(ZIP code)*

3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **12** *(day)* **01** *(year)* **1986**

2) Hour: *(24 hour clock)* **100**

3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **TN** **MARION** **WHITWELL**

4) If offshore, give offshore coordinates

5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)

6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

SEE ATTACHED MAP

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station

2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld

○ other *(specify)* **9**

3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees

2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 80,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **KEROSENE**

2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL

3) Estimated amount of commodity involved: **600** Barrels spilled **500** Barrels recovered

4) Was there an explosion? ○ yes ● no

5) Was there a fire? ○ yes ● no

PHMSA Data Facsimile

Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 8 2) Wall thickness *(inches)* 0.19

3) SMYS *(psi)* 42,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,318

7) Pressure at time and location of accident *(psig)* 1,256

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,831

11) Date of latest test *(month)* 1 *(day)* _____ *(year)* 63

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)* _____

PART J - CAUSED BY OUTSIDE FORCE

1)
● Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON DECEMBER 1, 1986, AT 00300 HOURS, THE CHATTANOOGA TO NASHVILLE, TENNESSEE, 8"DIAMETER PIPELINE WAS SHUT DOWN BY AUTOMATIC SAFETY DEVICES DUE TO A PUMP BEARING FAILURE AT THE MURFREESBORO, TENNESSEE, PUMP STATION. THE UNIT WAS REPAIRED, AND AT 0400 HOURS AN ATTEMPT WAS MADE TO RESTART THE PIPELINE, BUT THE PUMP STATION UPSTREAM OF MURFREESBORO WOULD NOT START DUE TO LOW SUCTION PRESSURE. THE PIPELINE WAS SECURED, AND EMERGENCY PERSONNEL WERE ALERTED TO A POSSIBLE LEAK IN THE PIPELINE. THE MARION COUNTY, TENNESSEE, SHERRIFF'S OFFICE WAS NOTIFIED AT 0800 HOURS THAT A POSSIBLE KEROSENE SPILL EXISTED FROM THE PIPELINE IN THE VICINTY OF WHITWELL, TENNESSEE. AT 1000 HOURS THE LEAK SITE WAS LOCATED ON A STEEP SLOPEOF THE SOUTH SIDE OF WHITWELL MOUNTAIN AS SHOWN ON THE ATTACHED PORTION OF A USC&GS MAP. A 15 FT. LONG SPLIT IN THE PIPE LONGITUDINAL SEAM WAS THE SOURCE OF THE FAILURE. SEVERAL DENTS IN THE PIPE WERE OBSERVED ALONG THE LONGITUDINAL SEAM WHICH WAS LOCATED NEAR THE 12 O'CLOCK POSITION. IT IS BELIEVED THAT THE PIPE WAS POSSIBLY DAMAGED BY CONTRACTOR EQUIPMENT ENGAGED IN CONSTRUCTING AN ADJACENT PARALLEL COLONIAL 10" DIAMETER PIPELINE IN 1972. APPROXIMATELY 600 BBLS. OF KEROSENE HAD SPRAYED FROM THE PIPE ONTO TREES AND ROCKS AND WAS APPEARING ON THE SURFACE OF THE MOUNTAIN SLOPE BELOW THE LEAD SITE. ALL OF THE 60 FT. LONG JOINT OF PIPE CONTAINING THE SPLIT WAS REMOVED FROM THE PIPELINE AND REPLACED WITH PRE-HYDROS

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J. S. SORROW

4042611470
Telephone no. *(including area code)*

Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date

No. 7000-1 **(DOT)**
19870147

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**

2) Principal business address _____

_____
(city) *(state)* *(ZIP code)*

3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **06** *(day)* **11** *(year)* **1987**

2) Hour: *(24 hour clock)* **947**

3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **VA** **FAIRFAX**

4) If offshore, give offshore coordinates _____

5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)

6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

SINGLETON'S WAY IN SINGLETON'S GROVE SUBDIVISION NEAR CENTREVILLE, VIRGINIA

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station

2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld

○ other *(specify)* _____

3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify) _____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees

2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**

2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL

3) Estimated amount of commodity involved: **370** Barrels spilled **118** Barrels recovered

4) Was there an explosion? ○ yes ● no

5) Was there a fire? ○ yes ● no

PHMSA Data Facsimile

Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 32 2) Wall thickness *(inches)* 0.28

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 657

7) Pressure at time and location of accident *(psig)* 190

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 789

11) Date of latest test *(month)* 12 *(day)* _____ *(year)* 63

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
● yes ○ no

PART K - ACCOUNT OF ACCIDENT

A CONTRACTOR WAS OPERATING A D-9 BULLDOZER TO PULL A ROCK RIPPER (PLOW) TO FACILITATE GRADING FOR A SIDE WALK TO BE CONSTRUCTED ACROSS THE COLONIAL PIPELINE RIGHT-OF-WAY IN THE SINGLETON'S GROVE SUBDIVISION. THE RIPPER STRUCK AND PUNCTUREDTHE 32" DIAMETER GREENSBORO, NORTH COROLINA TO DORSEY JUNCTION, MARYLAND PIPELINE AT 0947 HOURS EDT ON JUNE 11, 1987. PRIOR TO THE START OF CONSTRUCTION IN THEDEVELOPMENT THE PIPELINE HAD 38" OF COVER OVER THE PIPE, BUT GRADING ACTIVITY BEFORE THE ACCIDENT OCCURRED HAD LEFT APPROXIMATELY 30" OF COVER OVER THE PIPE ATTHE TIME OF THE PUNCTURE. A LINE MARKER WAS IN PLACE AND PLAINLY VISIBLE 25.5 FET FROM THIS POINT. THE PIPELINE WAS TRANSPORTING UNLEADED GASOLINE AT A PRESSURE OF 190 PSI AND FLOW RATE OF APPROXIMATELY 14,300 BPH WHEN THE INCIDENT OCCURRED. GASOLINE SPEWED FROM THE PIPE FOR ABOUT THREE MINUTES AND WAS BLOWN BY THE WIND AWAY FORM THE TRACTOR, OVER THE CONSTRUCTION OFFICE ABOUT 100 FEET FROM THE RUPTURE AND DISPERSED INTO A WOODED AREA OF ABOUT THREE ACRES. A COLONIAL PIPELINE COMPANY EMPLOYEE HAD JUST ARRIVED AT THE CONSTRUCTION OFFICE TO INQUIRE ABOUT THE LOCATION OF ANOTHER CONSTRUCTION PROJECT WHEN THE ACCIDENT HAPPENED. THE EMPLOYEE IMMEDIATELY RAN TO EQUIPMENT BEING OPERATED IN THE GENERAL AREA WARNING THE OPERATORS TO SHUT DOWN THEIR MACHINES AND VACATE THE AREA. THE EMPLOYEE THEN OPTAINED A RIDE TO THE FIRE STATION A FEW BLOCKS AWAY TO NOTIFY THE FAIRFAX COUNTY

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.S. SORROW

4042611470
Telephone no. *(including area code)*

Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date

No. 7000-1 **(DOT)** **19880188**

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**

2) Principal business address _____

_____

(city) *(state)* *(ZIP code)*

3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **10** *(day)* **13** *(year)* **1988**

2) Hour: *(24 hour clock)* **2049**

3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **GA** **COBB** **POWDER SPRINGS**

4) If offshore, give offshore coordinates _____

5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)

6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

4458 SHILOH TRAIL, LOST MOUNTAIN ESTATES SUBDIVISION POWDER SPRINGS, GA. (SEE ATTACHED MAP).

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station

2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld

○ other *(specify)* _____

3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify) _____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees

2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 250,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **DIESEL FUEL**

2) Classification of commodity spilled: ● Petroleum or Petroleum product ○ HVL or ○ Non-HVL

3) Estimated amount of commodity involved: **644** Barrels spilled **288** Barrels recovered

4) Was there an explosion? ○ yes ● no

5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 12 2) Wall thickness *(inches)* 0.22

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,286

7) Pressure at time and location of accident *(psig)* 1,120

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,440

11) Date of latest test *(month)* 0 *(day)* _____ *(year)* 63

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
○ yes ● no

PART K - ACCOUNT OF ACCIDENT

AN ESTIMATED 644 BARRELS OF DIESEL FUEL ESCAPED FROM COLONIAL'S LINE NO. 19 WHEN THE PIPELINE RUPTURED AT 8:49 PM. EDT, OCTOBER 13, 1988. THE ACCIDENT OCCURRED IN 12-3/4" OD, . 219" W.T., GRADE X52 LINE PIPE APPROXIMATELY SIX MILES DOWNSTREAM OF ATLANTA JUNCTION AT 4458 SHILOH TRAIL IN THE LOST MOUNTAIN ESTATES SUBDIVISION IN POWDER SPRINGS, GEORGIA. AN ADJACENT LANDOWNER CALLED COLONIAL'S CONTROL CENTER, AND SIMULTANEOUSLY THE ATLANTA JUNCTION ORIGINATING PUMPS WERE AUTOMATICALLY SHUTTING DOWN ON LOW SUCTION. COBB COUNTY FIRE AND POLICE PERSONNEL,AND COLONIAL RESPONSE AND MAINTENANCE PERSONNEL RESPONDED. RESIDENTS WERE EVACUATED FROM HOMES IN A THREE-BLOCK AREA AROUND THE LEAK SITE.AT APPROX. 12:30,EDT,ON OCT. 14, THE LINE AT THE LEAK SITE WAS EXCAVATED AND FOUND TO CONTAIN A RUPTURE 31 INCHES LONG AND 2-1/2 INCHES WIDE AT THE MAXIMUM OPENING. THE FRACTURE APPEARED TO HAVE ORIGINATED IN ONE OF SEVERAL GOUGES WHICH WERE THE RESULT OF THIRD PARTY,HEAVY EQUIPMENT DAMAGE. THIS DAMAGE, IN ADDITION TO THE GOUGES, APPEARED TO HAVE SEVERELY FLATTENED THE PIPE AND REMOVED APPROXIMATELY 8 FEET OF COATING. EIGHTEEN FEET OF PIPE CONTAINING THE RUPTURE AND THIRD-PARTY DAMAGE WERE REMOVED FROM THE PIPELINE AND REPLACED WITH 12-3/4" OD, .250" W.T., GRADE X52, HYDROSTATICALLY TESTED PIPE. THE TIE-IN WELDS WERE REDIOGRAPHED. SERVICE WAS RESTORED ON THE LINE AT 3:16 PM. EDT, ON OCTOBER 14. ENVIRONMANTAL RESTORATION WORK IS STILL IN PROGRESS.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES A. COX - TECHNICAL AND REGULATORY MANAGER

4048412296
Telephone no. *(including area code)*

Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date

No. 7000-1 **(DOT)**
19890023

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **01** *(day)* **03** *(year)* **1989**
2) Hour: *(24 hour clock)* **1025**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **NC** **CUMBERLAND**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ● yes ○ no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
FORT FRAGG ARMY MILITARY RESERVATION.

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **1**
0 Operator employees **1** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 25,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **20** Barrels spilled **0** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 6 2) Wall thickness *(inches)* 0.19

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 930

7) Pressure at time and location of accident *(psig)* 124

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,490

11) Date of latest test *(month)* 0 *(day)* _____ *(year)* 63

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
○ yes ● no

PART K - ACCOUNT OF ACCIDENT

AT APPROXIMATELY 10:25 AM. ON TUESDAY, JANUARY 3, 1989, COLONIAL PERSONNEL AT GREENSBORO WERE NOTIFIED BY ARMY POST ENGINEERS AT FORT GRAGG, THAT ITS 6" PIPELINE FROM APEX TO FAYETTEVILLE, NORTH CAROLINA, HAD BEEN PUNCTURED BY AN ARMY MOTOR GRADER PERFORMING MAINTENANCE ON A FIREBREAK ON THE FORT BRAGG ARMY RESERVATION. THE PIPELINE WAS IMMEDIATELY SHUT DOWN AND THE CUMBERLAND COUNTY FIRE AND POLICE DEPARTMENTS WERE NOTIFIED. THE PIPELINE WAS BLOCKED AT APEX AND LILLINGTONSTATIONS, AND THE SEGMENT BETWEEN LILLINGTON AND FAYETTEVILLE WAS ALLOWED TO DRAIN INTO TANKAGE AT TEXACO'S FAYETTEVILLE TERMINAL. PRIOR TO THE ARRIVAL OF COLONIAL'S REPONSE AND MAINTENANCE CREW, MILTARY MAINTENANCE PERSONNEL CONSTRUCTED EARTHEN PITS AND DAMS TO CONTAIN THE GASOLINE. IN ADDITION, THEY INSTALLED A TEMPORARY WATER SERVICE CLAMP ON THE 6" LINE TO HALT THE ESCAPE OF PRODUCT. COLONIAL'S MAINTENANCE PERSONNEL ARRIVED AT APPROXIMATLEY 1:00 PM. AND FOND THAT THE CLAMP HAD BEEN SUCCESSFULLY INSTALLED. LATER THEY LEARNED THAT ONE OF THE CIVILIAN MAINTENANCE EMPLOYEES WORKING FOR THE ARMY HAD BEEN OVERCOME BY FUMES. THISINCIDENT WAS REPORTED TO THE NATIONAL RESPONSE CENTER IN WASHINGTON AT APPROXIMATELY 5:30 PM. WHEN IT WAS DETERMINED THAT THE CONTRACT EMPLOYEE HAD BEEN HOSPITALIZED. CLEAN UP AND RECOVERY EFFORTS WERE CONTINUED BY COLONIAL AND THE FORT BRAGG ENVIRONMENTAL PERSONNEL.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES A. COX - TECHNCAL & REGULATORY MANAGER

4048412296
Telephone no. *(including area code)*

_____
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jun. 02, 1990
No. 7000-1 **(DOT)**
19900098

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **05** *(day)* **20** *(year)* **1990**
2) Hour: *(24 hour clock)* **1800**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **TN** **GRUNDY** **MARION**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
SEE ATTACHED SKETCH.

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ○ pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
● other *(specify)* **UNKNOWN**
3) Year item installed **1972**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 10,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ● HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **134** Barrels spilled **1** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 10 2) Wall thickness *(inches)* 0.22

3) SMYS *(psi)* 46,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,349

7) Pressure at time and location of accident *(psig)* 875

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,795

11) Date of latest test *(month)* 1 *(day)* _____ *(year)* 72

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
○ yes ● no

PART K - ACCOUNT OF ACCIDENT

COLONIAL'S ATLANTA CONTROLER RECEIVED A CALL FROM THE COALMONT TENNESSEE POLICE DEPARTMENT AT 2130 EST ON MAY 20, 1990. A BULLDOZER WORKING IN THE AREA KNOWN AS CLIFTY COVE AT CLIFTY CREEK ON THE MARION COUNTY - GRUNDY COUNTY LINE HAD HIT A PIPELINE AND CAUSED A LEAK. THIS OCCURRED WHERE CLIFTY CREEK FLOWS INTO THE LITTLE SEQUATCHIE RIVER. COLONIAL HAS TWO PIPELINES IN THIS AREAAND BOTH WERE IMMEDIATELY SHUT DOWN BY THE CONTROLLER. CONTRACT AND COLONIAL PERSONNEL WERE DISPATCHED FROM CHATTANOOGA AND NASHVILLE. AT 0230 ON MAY 21, 1990, THE LEAK WAS LOCATED AT THE BOTTOM OF A 1,200 FOOT SLOPE ACCESSIBLE ONLY ON FOOT OR BY TRACT VEHICLE. GASOLINE WAS LEAKING FROM THE PIPELINE THROUGH A GOUGED HOLE. HAND EXCAVATION OF THE LINE BEGAN AT ABOUT 0330 AND A FULL ENCIRCLEMENT REPAIR SLEEVE WAS INSTALLED BY 0900. OHTER PERSONNEL BEGAN INSTALLATION OF CONTAINMENT BOOMS ON THE LITTLE SEQUATCHIE RIVER AT CAMP GLANCZ, ONE MI WEST OF HIGHWAY 28, 5 MILES NORTH OF JASPER, TENNESSEE IN MARION COUNTY, 7 TO 8 MILES DOWNSTREAM FROM THE LEAK SITE. A HELICOPTER SURVEY REVEALED THAT PRODUCT HAD TRAVELED ABOUT TWO MILES DOWNSTREAM. LOCAL GOVERNMENT OFFICIALS WERE NOTIFIED AT APPROXIMATELY 0230 EST AND THE NATIONAL RESPONSE CENTER WAS NOTIFIED AT APPROXIMATELY 1440. THE DEPARTMENT OF TRANSPORTATION, OFFICE OF PIPELINE SAFETY, THE ENVIRONMENTAL PROTECTION AGENCY, TENNESSEE EMERGENCY MANAGEMENT AGENCY AND THE TENNESSEE WATER QUALITY RESPONDED TO

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES A. COX, MANAGER-TECHNICAL & REGULATORY

4048412296
Telephone no. *(including area code)*

Jun. 02, 1990
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jul. 23, 1990
No. 7000-1 **(DOT)**
19900112

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **06** *(day)* **22** *(year)* **1990**
2) Hour: *(24 hour clock)* **2158**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **VA** **CHESTERFIELD**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
SEE ATTACHED SKETCH.

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 50,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **2,000** Barrels spilled **1,924** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 16 2) Wall thickness *(inches)* 0.25

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,159

7) Pressure at time and location of accident *(psig)* 1,070

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,449

11) Date of latest test *(month)* 1 *(day)* _____ *(year)* 64

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
○ yes ● no

PART K - ACCOUNT OF ACCIDENT

Refer to ATTACHMENT PART K - ACCOUNT OF ACCIDENT

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES A. COX - MANAGER-TECHNICAL & REGULATORY

4048412296
Telephone no. *(including area code)*

Jul. 23, 1990
Date

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ATTACHMENT PART K - ACCOUNT OF ACCIDENT

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AT 2158 EDT ON JUNE 22, 1990, THE PIPELINE WAS SHUTDOWN IMMEDIATELY AFTER THE MITCHELL JUNCTION OPERATOR RECEIVED A LOW SUCTION PRESSURE ALARM AT RICHMOND DELIVERY FACILITY. HE CONCLUDED THAT HE HAD A POSSIBLE LEAK AND ISOLATED THE SEGMENT OF PIPELINE BETWEEN MITCHELL JUNCTION AND RICHMOND DELIVERY TAKE-OFF VALVE TO DRAIN PRODUCT FROM THE LINE. OPERATORS WERE ALSO DISPATCHED TO CLOSE MANUAL ISOLATION VALVES. LOCAL PERSONNEL AND THE MAINTENANCE AND RESPONSE CONTRACTOR WERE MOBILIZED TO INSPECTION ROAD AND WATER CROSSINGS AND DRAINAGE PATHS. THE VIRGINIA DEPARTMENT OF EMERGENCY SERVICES WAS NOTIFIED AT 2323 AND THE NATIONAL RESPONSE CENTER WAS NOTIFIED AT 2356. AT 0640 ON JUNE 23,AT DAYLIGHT, AN INSPECTION OF THE RIGHT-OF-WAY, BY HELICOPTER, WAS BEGUN. THE CHESTERFIELD COUNTY POLICE AND FIRE DEPARTMENTS AND THE RICHMOND POLICE AND FIRE DEPARTMENTS ASSISTED COLONIAL PERSONNEL IN THE SEARCH FOR THE LEAK. THE LEAK WAS LOCATED AT 0915 IN CHESTERFIELD COUNTY BY THE COLONIAL'S ENVIRONMENTAL SPECIALIST, AREA MANAGER AND MAINTENANCE SUPERVISOR TO INSPECT THE LEAK SITE. ALL PRODUCT WAS CONTAINED IN A PRIVATELY OWNED POND. THE CHESTERFIELDCOUNTY POLICE AND FIRE DEPARTMENTS WERE IMMEDIATELY NOTIFIED. COLONIAL'S SPILL CONTRACTOR ARRIVED AT THE SPILL SITE AT 1215 AND BEGAN RECOVERY ACTIVITIES AT 1230. AN ESTIMATED 2000 BARRELS OF PRODUCT WERE RELEASED, AND 1924 BARRELS HAVE BEEN RECOVERED. ENVIRONMENTAL CLEAN-UP OPERATIONS ARE STILL IN PROGRESS. THE PORTION OF THE PIPELINE WHICH CONTAINED THE FAILURE WAS UNDER WATER, AND A VISUAL INSPECTION AFTER REMOVAL REVEALED MECHANICAL DAMAGE ADJACENT TO THE FRACTURE. A PORTION OF THE PIPE CONTAINING THE FRACTURE AND DAMAGE WAS SENT TO A METALLURGICAL LABORATORY FOR ANALYSIS. A NEW SECTION OF PRETESTED PIPE AND ONE FITTING WAS INSTALLED,AND THE PIPELINE WAS RETURNED TO SERVICEAT 1700 ON JUNE 24. ALL WELDS WERE VISUALLY INSPECTED AND RADIOGRAPHED.

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Oct. 04, 1990
No. 7000-1 **(DOT)**
19900148

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **08** *(day)* **29** *(year)* **1990**
2) Hour: *(24 hour clock)* **1930**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **VA** **CHESAPEAKE**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
SEE ATTACHED SKETCH

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ○ pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ● longitudinal weld
○ other *(specify)* _____
3) Year item installed **1985**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **1,600** Barrels spilled **1,121** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 12.75 2) Wall thickness *(inches)* 0.22

3) SMYS *(psi)* 60,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,293

7) Pressure at time and location of accident *(psig)* 860

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 8

10) Maximum test pressure *(psig)* 1,617

11) Date of latest test *(month)* 12 *(day)* _____ *(year)* 85

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
● yes ○ no

5) Was pipeline location temporarily marked for the excavator?
● yes ○ no

PART K - ACCOUNT OF ACCIDENT

Refer to ATTACHMENT PART K - ACCOUNT OF ACCIDENT

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES A. COX, MANAGER-TECHNICAL AND REGULATORY

4048412296
Telephone no. *(including area code)*

Oct. 04, 1990
Date

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ATTACHMENT PART K - ACCOUNT OF ACCIDENT

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AT 20:00 EDT ON AUGUST 29, 1990, WHILE MAKING A DELIVERY TO CRANEY ISLAND DELIVERY FACILITY, THE MITCHELL JUNCTION OPERATOR DISCOVERED A 1,075 BARREL SHORTAGE. AFTER REVIEWING THE OPERATIONAL DATA, THE OPERATOR TERMINATED THE DELIVERY BY DIVERTING THE FULL STREAM INTO RICHMOND DELIVERY AND BLOCKING THE LINE AT RICHMOND STATION. HE SIMULTANEOUSLY CLOSED THE CRANEY ISLAND JUNCTION TAKEOFF VALVE AND THE CRANEY ISLAND DELIVERY FACILITY BLOCK VALVE AT 20:13.THE NORFOLK DELIVERY FACILITY OPERATOR WAS DISPATCHED TO CRANEY ISLAND DELIVERY AT 20:45 TO VISUALLY INSPECT THE FACILITY. NOTHING ABNORMAL WAS FOUND, AND AT 21:30 THE CHIEF OPERATOR OF THE NORFOLK DELIVERY FACILITY WAS ADVISED OF A POSSIBLE LEAK BETWEEN CRANEY ISLAND JUNCTION AND THE CRANEY ISLAND DELIVERY FACILITY. A SEARCH WAS INITIATED ALONG THE ROUTE OF THE PIPELINE, AND THESPILL WAS DISCOVERED AT 01:15 EDT ON AUGUST 30, 1990.THE COLONIAL GREENSBORO MAINTENANCE TEAM, WHICH WAS IN FREDERICKSBURG, VIRGINIA, AND A LOCAL CONTRACTOR, CENTRAL VIRGINIA MAINTENANCE, INC., WERE DISPATCHED TO THE LEAK SITE AT 01:15. IN ADDITION , INDUSTRIAL MARINE SERVICES, INC., A SPILL RESPONSE CONTRACTOR FROM NORFOLK,WAS REQUESTED TO SEND ASSISTANCE.LOCAL POLICE AND FIRE DEPARTMENTS WERE NOTIFIED BETWEEN 01:20 AND 01:30. THE NATIONAL RESPONSE CENTER WAS NOTIFIED AT 02:00, REPORT NO. 37547, AND THE VIRGINIA WATER POLLUTION CONTROL BOARD WAS NOTIFIED AT 02:45.FUEL OIL AT THE LEAK SITE HAD FLOWED DOWN AN UNNAMED TRIBUTARY INTO DRUM POINT CREEK WHICH WAS A MARSH AT THIS LOCATION. BOOMS WERE DEPLOYED ON DRUM POINT CREEK ONE-HALF MILE DOWNSTREAM JUST ABOVE TAYLOR ROAD. MOST PRODUCT WAS RECOVERED AT THE LEAK SITE. AN ESTIMATED 1600 BARRELS ESCAPED FROM THE PIPELINE, AND 1121 BARRELS HAVE BEEN RECOVERED AS OF THIS DATE. ABSORBENT BOOMS AREBEING MAINTAINED AT THE PRESENT TIME.THE PIPELINE WAS EXCAVATED AT THE LEAK SITE AND FOUND TO HAVE RUPTURED IN A BADLY DAMAGED SECTION. THE DAMAGE RESULTED DURING THE RECENT INSTALLATION OFAN ELECTRIC UTILITY'S 30-INCH CASING BENEATH COLONIAL'S PIPELINE BY A THIRD PARTY CONTRACTOR. TWENTY-FIVE FEET OF 12.750-INCH O.D., 0.219-INCH W.T., X60PIPE WERE REMOVED AND REPLACED WITH 12.750-INCH O.D., 0.250-INCH W.T., X60, HYDROSTATICALLY TESTED PIPE. ALL TIE-IN WELDS WERE RADIOGRAPHED.

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Nov. 08, 1991
No. 7000-1 **(DOT)**
19910194

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **10** *(day)* **17** *(year)* **1991**
2) Hour: *(24 hour clock)* **1100**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **TN** **DAVIDSON** **NASHVILLE**
4) If offshore, give offshore coordinates **N/A**
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
NEAR STATE HGWY 41A

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1976**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 30,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ● Petroleum or Petroleum product ○ HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **1** Barrels spilled **1** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 12 2) Wall thickness *(inches)* 0.25

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ○ Above ground

6) Maximum operating pressure *(psig)* 1,440

7) Pressure at time and location of accident *(psig)* 15

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 2,000

11) Date of latest test *(month)* _____ *(day)* _____ *(year)* 76

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
- ○ Damage by operator or its contractor
- ● Damage by others
- ○ Damage by natural force
- ○ Landslide
- ○ Subsidence
- ○ Washout
- ○ Frostheave
- ○ Earthquake
- ○ Ship anchor
- ○ Mudslide
- ○ Fishing operations
- ○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ● no

PART K - ACCOUNT OF ACCIDENT

On Oct. 17, 1991, the Pipeline Control Center in Atlanta, GA was notified bya contractor that, while taking soil samples, an auger had struck Colonial's12", gasoline pipeline between E. Nashville Delivery Facility and NashvilleDelivery Facility. The incident occurred between the Nashville and AshlandCity Railroad and State Highway 41A and near the east bank of the CumberlandRiver at 11:00a, CDT.The contractor had notified Tennessee's One-Call System at 9:52a on October15, 1991, stating that work would begin on Oct. 18, 1991. A Colonialinspector visited the site on Oct. 16, 1991 and noted that no constructionactivity had begun. The contractor had begun work on the 17th w/out advisingColonial.The Tennessee Emergency Management Agency was notified at 12:20p, CDT andMr. Tom Wilker at the National Response Center was notified (Report #92596)at 12:30 p, CDT on Oct. 17, 1991.At 12:45p, CDT, Colonial personnel and emergency clean up and repair crewsbegan arriving at the leak site. Excavation revealed that the auger hadstruck the side of the pipeline causing a small hole.A Plidco clamp was installed on the pipeline at 5:00p, CDT on Oct. 17, 1991.The line was then pressured and monitored revealing no additional leakage.As a result of clean up activities the product was recovered and returned tothe pipeline system. Contaminated soil had been removed for remediation.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES O. COX

4048412296
Telephone no. *(including area code)*

Nov. 08, 1991
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jan. 22, 1992
No. 7000-1 **(DOT)**
19920017

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **12** *(day)* **19** *(year)* **1991**
2) Hour: *(24 hour clock)* **2151**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **SC** **GREENVILLE** **SIMPSONVILLE**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
BETWEEN JONES MILL ROAD & CAROLINA SPRINGS COUNTRY CLUB AT DURBIN CREEK

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1962**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 250,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ● Petroleum or Petroleum product ○ HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **13,100** Barrels spilled **12,600** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 36 2) Wall thickness *(inches)* 0.28

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 500

7) Pressure at time and location of accident *(psig)* 423

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 719

11) Date of latest test *(month)* 1 *(day)* _____ *(year)* 63

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
○ yes ● no

PART K - ACCOUNT OF ACCIDENT

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES A COX - MANAGER TECHNICAL & REGULATORY

4048412296
Telephone no. *(including area code)*

Jan. 22, 1992
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Aug. 04, 1992
No. 7000-1 **(DOT)**
19920128

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **06** *(day)* **02** *(year)* **1992**
2) Hour: *(24 hour clock)* **706**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **SC** **ABBEVILLE**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
APPROX. 5 MILES NORTH OF DUE WEST, SC

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 19,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ● HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **32** Barrels spilled **31** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 8.63 2) Wall thickness *(inches)* 0.19

3) SMYS *(psi)* 42,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,318

7) Pressure at time and location of accident *(psig)* 528

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,367

11) Date of latest test *(month)* 1 *(day)* _____ *(year)* 63

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)* _____

PART J - CAUSED BY OUTSIDE FORCE

1)
● Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

WHILE INVESTIGATING AN ANOMALY ON COLONIAL'S 8 INCH LATERAL LINE FROM BELTON,SC TO NORTH AUGUSTA, SC, A MAINTENACE PIPELINE CONTRACTOR'S BACKHOE ACCIDENTAL PUNCTURED THE LINE AT 0706 EST ON 6/02/92. THE ANOMALY WAS DETECTED ON ANEARLIER MAGNETIC TOOL INSPECTION. COLONIAL'S INSPECTOR IMMEDIATELY ORDERED THE LINE SHUT DOWN AND NOTIFIED LOCAL SUPERVISION. OF THE 32 BARRELS OF FUELRELEASED INTO THE DITCH, 31 BARRELS WERE RECOVERED AND RETURNED TO THE SYSTEM. A TWO FOOT, FULL ENCIRCLEMENT SLEEVE WAS INSTALLED OVER THE DAMAGED PIPE AND THE LINE WAS RESTARTED AT 1420 EST ON 6/02/92. WHEN IT WAS DETERMINED THAT SOIL REMEDIATION COSTS MIGHT REULTS IN TOTAL PROPERTY DAMAGES EXCEEDING $5,000.00, PHONE CALLS WERE MADE TO STATE ENVIRONMENT PERSONNEL AT 1530 EST ON 6/2/92, AND TO THE NATIONAL RESPONSE CENTER (REPORT NO. 120145) AT 1612 EST ON 6/2/92. SOIL EXCAVATED FROM THE LEAK SITE HAS BEEN CONTAINED AND WILL BE DISPOSED OF AT AN APPROVED, OFFSITE FACILITY.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J A COX - MANAGER, TECHNICAL & REGULATORY

4048412296
Telephone no. *(including area code)*

Aug. 04, 1992
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Nov. 20, 1992
No. 7000-1 **(DOT)**
19920202

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **09** *(day)* **15** *(year)* **1992**
2) Hour: *(24 hour clock)* **1225**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **MD** **CECIL**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
COLONIAL PIPELINE COMPANY'S CONOWINGI PUMP STATION

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
○ line pipe ○ tank farm ● pump station
2) Item involved: ○ pipe ● valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1980**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
● other (specify) **FAILED CHECK VALVE SHAFT**

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 500,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ● HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **143** Barrels spilled **137** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

PHMSA Data Facsimile

Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 0 2) Wall thickness *(inches)* 0

3) SMYS *(psi)* _____ 4) Type of joint: ○ welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ○ Above ground

6) Maximum operating pressure *(psig)* _____

7) Pressure at time and location of accident *(psig)* _____

8) Had there been a pressure test on system?
○ yes ○ no

9) Duration of test *(hrs)* _____

10) Maximum test pressure *(psig)* _____

11) Date of latest test *(month)* 0 *(day)* _____ *(year)* 0

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*
_____

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON SEPTEMBER 15, 1992 AT 1225 EDT THE NRC WAS NOTIFIED (REPORT NO. 136749) AFTER PETROLEUM PRODUCT WAS DETECTED IN MONITORING WELLS AT COLONIAL PIPELINE COMPANY'S CONOWINGO PUMP STATION IN CECIL COUNTY, MARYLAND. PERIODIC MONITORING INDICATED THAT ACTIVE LEAKAGE WAS POSSIBLE AND EXCAVATION OF STATION PIPING ENSUED. AT APPROXIMATELY 1500 EDT ON OCTOBER 20, 1992, PRODUCT WAS FOUNDESCAPING FROM THE STATION DISCHARGE CHECK VALVE. AN INSPECTION OF THE CHECKVALVE REVEALED THAT THE INTERNAL SHAFT SEAL HAD FAILED. ADDITIONALLY, A THREADED PIPE CAP ON THE SHAFT HOUSING WAS FOUND TO BE SUFFICIENTLY TIGHTENED. THIS ALLOWED PRODUCT TO ESCAPE THE HOUSING AND ENTER THE SURROUNDING SOIL. CONTAMINATED SOIL WAS REMOVED FROM AROUND THE CHECK VALVE TO ALLOW FOR TEMPORARY REPAIRS. PERMANENT REPAIRS WILL BE MADE AT A LATER DATE. TO DATE, APPROXIMATELY 62 BARRELS OF A MIXTURE OF PETROLEUM PRODUCTS HAVE BEEN RECOVERED. EXCAVATION AND INSPECTION OF OTHER UNDERGROUND PIPING CONTINUES TO ENSURE THATNO OTHER LEAKAGE EXISTS. CONTAMINATED SOIL HAS BEEN STOCKPILED AND AWAITS DI

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES A COX - MGR TECHINAL & REGULATORY

4048412296
Telephone no. *(including area code)*

Nov. 20, 1992
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Apr. 30, 1993
No. 7000-1 **(DOT)**
19930049

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **03** *(day)* **28** *(year)* **1993**
2) Hour: *(24 hour clock)* **849**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **VA** **FAIRFAX**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1980**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 10,000,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ● HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **9,708** Barrels spilled **8,463** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 36 2) Wall thickness *(inches)* 0.34

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 687

7) Pressure at time and location of accident *(psig)* 484

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 858

11) Date of latest test *(month)* 10 *(day)* _____ *(year)* 80

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
- ○ Damage by operator or its contractor
- ○ Damage by others
- ○ Damage by natural force
- ○ Landslide
- ○ Subsidence
- ○ Washout
- ○ Frostheave
- ○ Earthquake
- ○ Ship anchor
- ○ Mudslide
- ○ Fishing operations
- ● Other UNDER INVESTIGATION

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

AT 0849 EST ON MARCH 28, 1993, THE CONTROLLER OPERATING COLONIAL'S 36" LINE 03 OBSERVED A RAPID, SIGNIFICANT SUCTION PRESSURE DROP AT THE DORSEY JUNCTIONPUMP STATION LOCATED NEAR WOODBINE, MD WHICH INDICATED A POSSIBLE LEAK BETWEEN CHANTILLY PUMP STATION NEAR FAIRFAX, VA AND DORSEY JUNCTION. THE BALTIMORE AREA MANAGER WAS NOTIFIED AT 0851 EST AND IMMEDIATELY BEGAN THE PROCESS OF INSTITUTING COLONIAL'S EMERGENCY RESPONSE NOTIFICATION AND MOBILIZATION. AT 0927 EST THE ATLANTA CONTROL CENTER WAS NOTIFIED BY THE FAIRFAX, VA COUNTY POLICE THAT A LEAK EXISTED IN THE AREA ADJACENT TO THE RESTON HOSPITAL CENTER.COLONIAL PERSONNEL BEGAN ARRIVING AT THE LEAK SITE AT 0942 EST AND BEGAN INITIAL CONTAINMENT ACTIVITIES. AT 1004 EST NOTIFICATION WAS MADE TO THE NATIONAL RESPONSE CENTER (REPORT NO. 164492). AT 1010 EST, NOTIFICATION WAS MADE TO THE EASTERN REGION, OFFICE OF PIPELINE SAFETY. AT 1020 EST, NOTIFICATION WAS MADE TO THE NATIONAL TRANSPORTATION SAFETY BOARD. IN ADDITION THE U.S. COAST GUARD, THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AND THE MARYLAND DEPARTMENT OF THE ENVIRONMENT WERE ALSO ADVISED OF THE LEAK. CONTAINMENT BOOMS WERE DEPLOYED AT SEVERAL LOCATIONS ON THE SUGARLAND RUN, A TRIBUTARY OF THE POTOMAC RIVER TO CONTAIN THE 9,708 BARRELS OF FUEL OIL CALCULATED TO HAVE ESCAPED THROUGH FROM THE RUPTURE. AS OF 4/16/93, 8449 BARRELS OF PRODUCT HAVEBEEN RECOVERED. RECOVERY ACTIVITIES ARE CONTINUING. THE INVESTIGATION INTOTHE CAUSE OF THE INCID

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J A COX - MGR. - TECHNICAL & REGULATORY

4048412296
Telephone no. *(including area code)*

Apr. 30, 1993
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Aug. 24, 1993
No. 7000-1 **(DOT)**
19930119

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **07** *(day)* **20** *(year)* **1993**
2) Hour: *(24 hour clock)* **1101**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **MD** **BALTIMORE**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
leak site 8inch line 36 station 382+68

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1964**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 5,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ● Petroleum or Petroleum product ○ HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **1** Barrels spilled **1** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 8.63 2) Wall thickness *(inches)* 0.22

3) SMYS *(psi)* 42,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,535

7) Pressure at time and location of accident *(psig)* 888

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,513

11) Date of latest test *(month)* 3 *(day)* _____ *(year)* 64

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

AT 1101 EDT ON JULY 20,1993, COLONIAL PERSONNEL WERE NOTIFIED BY A THIRD PARTY OF THE PRESENCE OF A GASOLINE ODOR AND A SHEEN ON A TRIBUTARY OF LONG GREENCREEK NEAR HYDES, MARYLAND. COLONIA'S LINE 36 FROM ABERDEEN JUNCTION TO NORTH BALTIMORE DELIVERY TRAVERSED THIS AREA,AND AT 1121 EDT THE LINE WAS SHUT DOWN. AN INVESTIGATOR WAS DISPATCHED TO THE SCENE AND FOUND SMALL BUBBLES OF GASOLINE LEAKING INTO THE CREEK. EMERGENCY RESPONSE PERSONNEL, INCLUDING A LOCAL SPILL CONTRACTOR, WERE IMMEDIATELY DISPATCHED TO THE THE SCEN TO BEGIN CONTAINMENT AND CLEAN-UP ACTIVITIES. A CONTAINMENT DAM DOWNSTREAM OF THE LEAK ANDABSORBENT DIAPERS WERE INSTALLED TO ASSIST THE RECOVERY OF PRODUCT. LOCAL FIRE AND POLICE DEPARTMENTS WERE CALLED TO THE SITE AND AT 1250 EDT THE NATIONAL RESPONSE CENTER WAS NOTIFIED OF THE INCIDENT (REPORT NO. 187501). AT 1300 EDT THE STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT WAS NOTIFIED OF THE INCIDENT. EXCAVATION OF THE PIPELINE REVEALED PRODUCT WAS LEAKING FROM A SMALL CRACK IN A GOUGE. THIS GOUGE APPEARED TO BE THE RESULT OF THIRD PARTY MECHANICAL DAMAGE. THE DAMAGED SECTION WAS REMOVED AND REPLACED WITH PREHYDROSTATICALLY TESTED PIPE. THE SECTION OF THE PIPE CONTAINING THE DAMAGE HAS BEEN FORWARDED TO AN INDEPENDENT METALLURGIST FOR ANALYSIS. THE ENVIRONMENTAL DEPARTMENTHAS IMPACT STUDIES AND AR MONITORING CONTINUING CLEAN-UP ACTIVITIES. IT IS ESTIMATED THAT LESS THAN 20 GALLONS OF GASOLINE ESCAPED FROM THE SYSTEM A

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JAMES L. GAMBRELL - ADMINISTRATOR

4048412402
Telephone no. *(including area code)*

Aug. 24, 1993
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Nov. 15, 1993
No. 7000-1 **(DOT)**
19930174

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **08** *(day)* **30** *(year)* **1993**
2) Hour: *(24 hour clock)* **1515**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **LA** **JEFFERSON DAVIS**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1976**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 5,400

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ● Petroleum or Petroleum product ○ HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **0** Barrels spilled **0** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 40 2) Wall thickness *(inches)* 0.31

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 584

7) Pressure at time and location of accident *(psig)* 100

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 731

11) Date of latest test *(month)* _____ *(day)* _____ *(year)* 76

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
- ○ Damage by operator or its contractor
- ○ Damage by others
- ○ Damage by natural force
- ○ Landslide
- ○ Subsidence
- ○ Washout
- ○ Frostheave
- ○ Earthquake
- ○ Ship anchor
- ○ Mudslide
- ○ Fishing operations
- ● Other UNDETERMINED SOURCE

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON AUGUST 30, 1993, COLONIAL MAINTENANCE PERSONNEL WERE EXCAVATING THE 40" LINE 01 NEAR BAYOU NEZPIQUE IN LOUISIANA TO INVESTIGATE AN INDICATION RECORDEDBY AN INTERNAL MAGNETIC INSPECTION TOOL. DURING THE EXCAVATION, GASOLINE FUMES WERE DISCOVERD. AFTER THE PIPE WAS EXPOSED, AN 8 FOOT LONG, LONGITUDINAL INDENTATION WAS FOUND ON THE PIP IN THE 7 TO 9 O'CLOCK POSITION. UPON CLOSER EXAMINATION, 1 1.5" CRACK WAS FOUND IN THE INDENTATION, BUT NO PRODUCT WAS FOUND LEAKING FROM THE CRACK AND ONLY WHEN THE LINE PRESSURE WAS HIGHER THAN THE 100 PSIG. THE LINE WAS OPERATING AT DURING THE EXCAVATION. AT 1605 CDT THE NATIONAL RESPONSE CENTER (REPORT NO. 195396) WAS NOTIFIED OF THE INCIDNET. TELEPHONIC NOTIFIECATION OF THE INCIDENT WAS ALSO MADE TO THE LOCAL SHERIFF'S DEPARTMENT, THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY, AND AS A COURTESY, THE SOUTHWEST REGION OF THE OFFICE OF PIPELINE SAFETY. REPAIR TO THE PIPELINE WAS MADE BY THE INSTALLATION OF A FOOT LONG, FULL ENCIRCLEMENT SLEEVE. ALL SLEEVE WELDS WERE INSPECTED BY MAGNETIC PARTICLE EXAMINATION AND THE SLEEVE WAS COATED WITH PRIMER AND POLYKEN TAPE. THE SOURCE OF THE OUTSIDE FORCE DAMAGE THAT CAUSED THE INDENTATION CANNOT CONCLUSIVELY BE DETERMINED.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.L. GAMBRELL - ADMINISTRATOR TECHNICAL & REGULATORY

4048412402
Telephone no. *(including area code)*

Nov. 15, 1993
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Sep. 27, 1993
No. 7000-1 **(DOT)**
19930188

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **08** *(day)* **26** *(year)* **1993**
2) Hour: *(24 hour clock)* **1445**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **TN** **GRUNDY** **COALMONT**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 30,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ● Petroleum or Petroleum product ○ HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **200** Barrels spilled **184** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 8.63 2) Wall thickness *(inches)* 0.19

3) SMYS *(psi)* 42,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,318

7) Pressure at time and location of accident *(psig)* 54

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 8

10) Maximum test pressure *(psig)* 1,390

11) Date of latest test *(month)* 12 *(day)* _____ *(year)* 63

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
○ yes ● no

PART K - ACCOUNT OF ACCIDENT

AT 1341 EST ON AUGUST 26, 1993, A HIGHWAY CONTRACTOR NOTIFIED COLONIAL'S CONTROL CENTER IN ATLANTA, GA THAT HIS EQUIPMENT HAD RUPTURED AN 8-INCH PIPELINEAT HIGHWAY 108 NEAR COALMONT, TN. THE CONTROL CENTER SHIFT SUPERVISOR IMMEDIATELY NOTIFIED THE CHATTANOOGA AREA OFFICE OF THE INCIDENT. EMERGENCY RESPONSE PERSONNEL INCLUDING SPILL CONTRACTORS WERE DISPATCHED TO THE SCENE AND THE NATIONL RESPONSE CENTER WAS NOTIFIED OF THE INCIDENT AT 1350 EST (REPORT NO.194776). WHEN COMPANY PERSONNEL ARRIVED AT THE SCENE AT 1545 EST. THE HIGHWAYCONTRACTOR HAD ALREADY CONSTRUCTED A SMALL POND AND CONTAINED FUEL OIL ESCAPED FROM THE RUPTURED PIPELINE WHICH RUNS FRON ATLANTA, GA TO NASHVILLE, TN. THE AMOUNT OF PRODUCT RELEASED WHEN THE CONTRACTORS RIPPER HIT THE PIPELINE WAS MINIMAL BECAUSE THIS SEGMENT OF THE LINE WAS SHUT DOWN AT THE TIME OF THE INCIDENT. CLEAN-UP OPERATIONS RECOVERED 184 BARRELLS OF PRODUCT. THE LINE WAS REPAIRED BY INSTALLING 6 FEET OF PREHYDROSTATICALLY TESTED 8.625" OD PIPE.THE TIE-IN WELDS WERE RADIOGRAPHED AND THE LINE RETURNED TO SERVICE. AN INVESTIGATION OF THE INCIDENT DETERMINED THAT THE CONTRACTOR HAD NOT MADE A "ONE-CALL" NOTICE BEFORE BEGINNING THE ROAD WORK. THE CONSTRUCTION SHOULD HAVE BEEN OFF RIGHT-OF-WAY, BUT THE TRACTOR OPERATOR MISTAKENLY ENTERED THE RIGHT-OF-WAY. THE CONTAMINATED SOIL HAS BEEN EXCAVATED AND PLACED IN A PLASTIC LINED PIT AND WILL DISPOSED OF.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.L. GAMBRELL - ADMINISTRATOR

4048412402
Telephone no. *(including area code)*

Sep. 27, 1993
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Mar. 01, 1994
No. 7000-1 **(DOT)**
19940087

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **02** *(day)* **08** *(year)* **1994**
2) Hour: *(24 hour clock)* **1406**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **LA** **EAST FELICIANA** **PORT HUDSON**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
COLONIAL PIPELINE COMPANY'S BATON ROUGE JUNCTION 1476 HIGHWAY 61 JACKSON, LA 70748

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
○ line pipe ○ tank farm ● pump station
2) Item involved: ○ pipe ○ valve ○ scraper trap ● pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1976**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
● other (specify) **UNDER INVESTIGATION**

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 500,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **430** Barrels spilled **420** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 0 2) Wall thickness *(inches)* 0

3) SMYS *(psi)* _____ 4) Type of joint: ○ welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ○ Above ground

6) Maximum operating pressure *(psig)* _____

7) Pressure at time and location of accident *(psig)* _____

8) Had there been a pressure test on system?
○ yes ○ no

9) Duration of test *(hrs)* _____

10) Maximum test pressure *(psig)* _____

11) Date of latest test *(month)* _____ *(day)* _____ *(year)* _____

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*
_____

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON FEBRUARY 8, 1994, AT 1406 CST, THE BATON ROUGE NO. 1 STATION CAN PUMP VESSEL RUPTURED DURING A LINE SWITCHING OPERATION AND SPILLED AN ESTIMATED 430 BARRELS OF NO.2 FUEL OIL INTO THE STATION YARD. THE IMMEDIATE RESPONSE ACTIONSOF THE STATION PERSONNEL RESULTED IN THE RECOVERY OF 90 - 95% OF THE PRODUCTWITHIN A FEW HOURS, AND PREVENTED THE SPILLED PRODUCT FROM REACHING THE STATION RETENTION POND OR ESCAPING THE FACILITY YARD. BECAUSE RECENT RAINS HAD SATURATED THE SOIL, RECOVERY OPERATIONS WERE GREATLY FACILITATED AND IT IS ESTIMATED THAT ONLY 10 BARRELS OF THE FUEL OIL SEEPED INTO THE SOIL. THE FOLLOWING AGENCIES WERE NOTIFIED OF THE INCIDENT: THE NATIONAL RESPONSE CENTER (REPORT NO. 220874) AT 1537 CST AND THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY AT 1545 CST. A COURTESY CALL WAS ALSO MADE TO THE SOUTHWEST REGION OF THE OFFICE OF PIPELINE SAFETY. THIS INCIDENT IS STILL UNDER INVESTIGATION AND A SUPPLEMENTAL REPORT WILL BE FILED AFTER FINAL DTERMINATIONS ARE KNOWN.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.L. GAMBRELL - ADMINISTRATOR-TECHNICAL & REGULATORY

4048412402
Telephone no. *(including area code)*

Mar. 01, 1994
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jul. 31, 1994
No. 7000-1 **(DOT)**
19940206

PART A - OPERATOR INFORMATION

1) Name of operator **2552 COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **06** *(day)* **29** *(year)* **1994**
2) Hour: *(24 hour clock)* **1050**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **AL BIBB**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

LINE 1, 36 INCH OD P/L; 2 INCH BLEEDER VALVE; LINE #1 STATION 4339 + 97; NEAR COFFEE CREEK, BIBB CTY, AL

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ○ pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
● other *(specify)* **2" THREADED PIPE**
3) Year item installed **1962**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 5,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **200** Barrels spilled **51** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 0 2) Wall thickness *(inches)* 0

3) SMYS *(psi)* _____ 4) Type of joint: ○ welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ○ Above ground

6) Maximum operating pressure *(psig)* _____

7) Pressure at time and location of accident *(psig)* _____

8) Had there been a pressure test on system?
○ yes ○ no

9) Duration of test *(hrs)* _____

10) Maximum test pressure *(psig)* _____

11) Date of latest test *(month)* _____ *(day)* _____ *(year)* _____

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*
_____

PART J - CAUSED BY OUTSIDE FORCE

1)
● Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

Refer to ATTACHMENT PART K - ACCOUNT OF ACCIDENT

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.L. GAMBRELL

4048412402
Telephone no. *(including area code)*

Jul. 31, 1994
Date

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ATTACHMENT PART K - ACCOUNT OF ACCIDENT

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ON THE MORNING OF JUNE 29, 1994, A COMPANY CONTRACTOR, WITH A COLONIAL EMPLOYEE/INSPECTOR PRESENT, WAS EXPOSING COLONIAL'S LINE 01, A 36-INCH OD PIPELINETO INSPECT A 2 INCH BLEEDER VALVE. AFTER LOCATING THE LINE, THE BACKHOE OPERATOR DUG TO THE SIDE OF THE LINE UNTIL IT WAS EXPOSED. AFTER EXPOSING THE SIDE OF THE PIPELINE, THE OPERATOR BEGAN SLOUGHING DIRT OFF THE TOP OF THE LINE USING THE BUCKET BACKSIDE. IT WAS DURING THIS OPERATION THAT THE 2-INCH THREADED PIPE CONNECTING THE BLEEDER VALVE TO BECOM SEPARATED FROM THE PIPELINE WHICH RESULTED IN A STREAM OF GASOLINE SPRAYING FROM THE PIPELINE. THERE IS NO EVIDENCE THAT THE BACKHOE BUCKET ACTUALLY STRUCK THE BLEEDER VALVE; IT IS SURMISED THAT SUFFICIENT PRESSURE WAS EXERTED THROUGH THE SOIL TO DISLODGE THE VALVE. THE INCIDENT OCCURRED AT APPROXIMATELY 1050, CDT. THE COLONIAL INSPECTOR IMMEDIATELY EVACUATED THE CREW FROM THE AREA AND RADIOED THE OPERATOR AT PELHAM TANK FARM, THE NEAREST MANNED STATION, AND REQUESTED THE PIPELINE SHUT DOWN. ALL UPSTREAM PUMPING UNITS WERE SHUT DOWN AND THE LINE WAS BLOCKED AT VANCE STATION, THE FIRST UPSTREAM STATION, AT 1056, CDT. THE DOWNSTREAM PUMPINGUNITS WERE KEPT RUNNING TO PULL PRODUCT FORM THE SITE. ONCE THESE UNITS SHUTDOWN BECAUSE OF LOW SUCTION PRESSURE, THE LINE WAS BLOCKED DOWNSTREAM OF THEINCIDENTS. AFTER DETERMINING THE SAFETY OF ALL EMPLOYEES PRESENT, THE COLONIAL INSPECTOR ESTABLISHED A HOT ZONE AROUND THE LEAK SITE AND DISPATCHED PERSONNEL TO BLOCK TRAFFIC ON NEARBY STATE HIGHWAY 27 AND TO EVACUATE A NEARBY NEIGHBOR. LOCAL FIRE AND POLICE AUTHORITIES WERE NOTIFIED AT 1113, CDT. EMERGENCY RESPONSE PERSONNEL WERE DISPATCHED TO THE INCIDENT SITE AND BEGAN ARRIVING SHORTLY AFTER, 1200 CDT. THE NATIONAL RESPONSE CENTER WAS NOTIFIED OF THE INCIDENT AT 1135, CDT, REPORT NO 246688. THE ALABAMA DEPARTMENT OF ENVIRONMENTALMANAGEMENT AND THE EPA REGION IV WERE ALSO NOTIFIED OF THE INCIDENT. A COURTESY NOTIFICATION CALL WAS MADE TO THE SOUTHERN REGION OF THE OFFICE OF PIPELINE SAFETY. A REPRESENTATIVE OF THE OFFICE OF PIPELINE SAFETY ARRIVED AT THE SITE AT APPROXIMATELY 2000, CDT, ON THE 29TH. THE ESCAPED GASOLINE STREAM WAS CONTAINED BY THE PLACEMENT OF EARTHEN DAMS AND COLLECTION PITS IN A DITCH LOCATED DOWNSTREAM OF THE LEAK SITE. RECOVERY OPERATIONS COLLECTED 51 BARRELS OFTHE APPROXIMATE 200 BARRELS OF PRODUCT THAT IS ESTIMATED TO HAVE ESCAPED FROM THE PIPELINE. THE REMAINDER OF THE SPILLED PRODUCT EITHER EVAPORATED OR

SATURATED INTO THE SURROUNDING SOIL. AFTER ALL THE FREE PRODUCT SURROUNDING THE INCIDENT SITE WAS COLLECTED AND THE AREA WAS MONITORED AND DETERMINED TO BE SAFE, THE THREADS ON THE 2-INCH THREAD-O-LET WERE RE-TAPPED AND A THREADED PLUG WAS INSTALLED IN THE PIPELINE. AN EXAMINATION OF THE PIPELINE REVEALED THATNO OTHER DAMAGE EXISTED AND THE LINE WAS RESTARTED AT 1756, CDT. CONTAMINATED SOIL HAS BEEN STOCKPILED ON PLASTIC ENVELOPES FOR DISPOSAL AT SOME LATER DATE. THE ENVIRONMENT SECTION IS PRESENTLY CONDUCTING TEST TO DETERMINE IF ADDITIONAL CONTAMINATION EXISTS.

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Nov. 21, 1994
No. 7000-1 **(DOT)**
19940236

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **10** *(day)* **20** *(year)* **1994**
2) Hour: *(24 hour clock)* **831**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **TX** **HARRIS**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1979**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **925**
0 Operator employees **925** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 10,000,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **20,000** Barrels spilled **0** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ● yes ○ no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 40 2) Wall thickness *(inches)* 0.34

3) SMYS *(psi)* 60,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 743

7) Pressure at time and location of accident *(psig)* 238

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 939

11) Date of latest test *(month)* 0 *(day)* _____ *(year)* 79

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)* _____

PART J - CAUSED BY OUTSIDE FORCE

1)
- ○ Damage by operator or its contractor
- ○ Damage by others
- ○ Damage by natural force
- ○ Landslide
- ○ Subsidence
- ● Washout
- ○ Frostheave
- ○ Earthquake
- ○ Ship anchor
- ○ Mudslide
- ○ Fishing operations
- ○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON THURSDAY, OCTOBER 20, 1994, A PRESSURE DROP AND SIGNIFICANT RATE INCREASEON LINE 01, WERE NOTED AT HOUSTON STATION BY THE LOCAL STATION OPERATOR AND BY THE LINE CONTROLLER IN ATLANTA,GA AT APPROXIMATELY 0831 CDT. THE LINE WAS IMMEDIATELY SHUT DOWN AND COMPANY PERSONNEL BEGAN SEARCHING FOR A POSSIBLE LEAK. PERSONNEL WERE ALSO DISPATCHED TO CLOSE BLOCK VALVES BETWEEN HOUSTON STATION AND SHILOH STATION. AT 0937 CDT GASOLINE WAS FOUND IN A NEW CHANNEL CREATED BY FLOOD WATERS OF THE SAN JACINTO RIVER, APPROXIMATELY 12.5 MILES DOWNSTREAM OF HOUSTON STATION. THE PIPELINE WAS SEVERED NEAR THE WEST BANK OF THE NEW CHANNEL. SHORTLY AFTER THE DISCOVERY OF THE LOCATION OF THE LEAK, THE GASOLINE FUMES IGNITED NEAR THE RIVER ROAD AREA OF CHANNELVIEW, TX. TELEPHONIC NOTICE WAS MADE TO THE NRC AT 0924 CDT ON 10/20/1994, REPORT NO. 266190. IT IS ESTIMATED THAT 20,000 BARRELS OF GASOLINE ESCAPED FROM THE SEVERED PIPELINE, ALL OF WHICH WAS CONSUMED BY THE FIRE OR LOST TO EVAPORATION. WHILE AT THE PRESENT TIME THE ESTIMATED TOTAL PROPERTY DAMAGES ARE UNDETERMINED,THE COMBINED COSTS FOR THE LINE 01, LINE 02 AND THE TEXACO CRUDE OIL LINE BREAKS ARE EXPECTED TO EXCEED $10,000,000. THIS INCIDENT IS UNDER INVESTIGATION BY THE NTSB. THE NUMBER OF PERSON (1851) INJURIED IS A COMBINED TOTAL WITH LINE 02 BREAK AND TEXACO CRUDE OIL LINE SEE REPORT #940237 FOR LINE 2 INFORMATION.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.L. GAMBRELL

4048412404
Telephone no. *(including area code)*

Nov. 21, 1994
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Mar. 11, 1996
No. 7000-1 **(DOT)**
19960038

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **02** *(day)* **06** *(year)* **1996**
2) Hour: *(24 hour clock)* **1300**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **TN** **HAMILTON** **CHATTANOOGA**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
8" LINE #20 STATION 121+48

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ○ pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
● other *(specify)* **NOT GIVEN**
3) Year item installed **1962**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 3,783,046

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **1,750** Barrels spilled **48** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 8.63 2) Wall thickness *(inches)* 0.28

3) SMYS *(psi)* 42,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ● Below ground ○ Above ground

6) Maximum operating pressure *(psig)* 1,942

7) Pressure at time and location of accident *(psig)* 475

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,604

11) Date of latest test *(month)* 10 *(day)* _____ *(year)* 1963

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
- ○ Damage by operator or its contractor
- ○ Damage by others
- ○ Damage by natural force
- ○ Landslide
- ○ Subsidence
- ○ Washout
- ○ Frostheave
- ○ Earthquake
- ○ Ship anchor
- ○ Mudslide
- ○ Fishing operations
- ● Other ELECTRICAL DISCHARGE CURR

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

Refer to ATTACHMENT PART K - ACCOUNT OF ACCIDENT

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.L. GAMBRELL

4048412402
Telephone no. *(including area code)*

Mar. 11, 1996
Date

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ATTACHMENT PART K - ACCOUNT OF ACCIDENT

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AT APPROXIMATELY 1310 EST ON FEBRUARY 6, 1996, A LANDOWNER ON LOOKOUT MOUNTAIN TENNESSEE, REPORTED TO A COLONIAL PIPELINE COMPANY REPRESENTATIVE THAT A PETROLEUM ODOR AND YELLOW STAINS IN THE SNOW WERE PRESENT NEAR THE COMPANY'S LINE 20, AND 8-INCH OD PIPELINE THAT TRAVERSES THE AREA. A COMPANY EMPLOYEE DISPATCHED TO THE AREA ARRIVED AT THE SCENE AT 1355 EST AND CONFIRMED THE PRODUCT WAS LEAKING AT THE DOWNSTREAM END OF A CASED, OVERHEAD CROSSING OF COLONIAL'S 8-INCH LINE THAT IS ADJACENT TO A SMALL SERVICE ROAD. THE ATLANTA CONTROLCENTER WAS NOTIFIED, AND THE LINE WAS IMMEDIATELY SHUT DOWN. AT 1508 EST THENATIONAL RESPONSE CENTER WAS NOTIFIED, REPORT NO. 324453, AND AT 1520 EST THE TENNESSEE EMERGENCY MANAGEMENT AGENCY WAS INFORMED OF THE LEAK. OTHER AGENCIES NOTIFIED INCLUDE THE CHATTANOOGA STORM WATER DIVISION AND LOCAL FIRE AND POLICE DEPARTMENTS. AFTER EXCAVATION OF THE PIPELINE AT THE END OF THE OVERHEAD SPAN, PRODUCT WAS FOUND TO BE ESCAPING FROM 3 SMALL HOLES PENETRATING THROUGH THE BOTTOM OF BOTH THE CASING PIPE AND THE CARRIER PIPE. THE LINE WAS REPAIRED INITIALLY BY INSTALLING A WELDED, SPLIT-SOLE REPAIR SLEEVE OVER THE HOLES AND RESTARTED AT A REDUCED PRESSURE ON FEBRUARY 7, 1996. THE COMPANY CONTINUED TO MONITOR THE LEAK SITE AND WHEN A SMALL AMOUNT OF PRODUCT WAS DETECTEDESCAPING FROM THE END OF THE CASING ON FEBRUARY 9, 1996, THE LINE WAS AGAIN SHUT DOWN TO SEARCH FOR ADDITIONAL LEAKS. THE ENTIRE 120 FOOT SPAN OF CASING AND CARRIER PIPE WAS REMOVED AND INSPECTED. NO ADDITIONAL LEAKS WERE FOUND AND IT WAS DETERMINED THAT THE PRODUCT PROBABLY WAS FROM THE ORIGINAL RELEASE AND HAD BEEN TRAPPED BY ICE DAMS INSIDE THE CASING. REPAIRS TO THE LINE WERE MADE BY INSTALLING APPROXIMATELY 120 FEET OF 8.625-INCH O.D. X.322-INCH W.T. CARRIER PIPE ENCASED IN 12-INCH O.D. CASING PIPE. COLONIAL AGAIN RESTARTED THELINE ON FEBRUARY 10, 1996, AT A REDUCED PRESSURE. A PRELIMINARY INVESTIGATION INDICATES THAT THE CAUSE OF INCIDENT WAS SOME SORT OF ELECTRICAL DISCHARGE CURRENT. AND INVESTIGATION TO DETERMINE THE SOURCE OF THE ELECTRICAL CHARGE CONTINUES AND A SUPPLEMENTAL REPORT WILL BE FILED AT A LATER DATE. IT IS ESTIMATED THAT APPROXIMATELY 1750 BARRELS OF KEROSINE AND FUEL OIL ESCAPED INTO THE ENVIRONMENT. APPROXIMATELY 44 BARRELS OF THE PRODUCT HAVE BEEN RECOVERED AND RETURNED TO THE SYSTEM. THE REMAINING PRODUCT APPARENTLY HAS SEEPED INTO THE FRACTURED ROCK, AND CAVERNS THAT ARE PREVALENT IN THE MOUNTAIN. TO DATE NOPRODUCT HAS BEEN

DETECTED IN ANY OF THE STREAMS ON OR NEAR THE MOUNTAIN. ENVIRONMENTAL MONITORING OF THE CAVERNS AND STREAMS CONTINUE.

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jun. 20, 1996
No. 7000-1 **(DOT)**
19960091

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **05** *(day)* **17** *(year)* **1996**
2) Hour: *(24 hour clock)* **1630**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **NC** **GUILFORD** **GREENSBORO**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 100,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **1** Barrels spilled **1** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 8.63 2) Wall thickness *(inches)* 0.19

3) SMYS *(psi)* 42,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,252

7) Pressure at time and location of accident *(psig)* 1,075

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,566

11) Date of latest test *(month)* 0 *(day)* _____ *(year)* 63

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
● Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON MAY 17, 1996, AT 1530 HOURS COLONIAL PIPELINE COMPANY WAS NOTIFIED OF A SHEEN OF PRODUCT ON A CREEK OFF INDIAN HILLS LANE. ALL THREE SELMA STUBLINES WERE SHUT DOWN AT 1534 HOURS. THE NATIONAL RESPONSE CENTER WAS NOTIFIED AT 1624HOURS (REPORT NUMBER 342514). THE SOURCE OF THE LEAK WAS DISCOVERED TO BE ANON LINE 23 AT 2242 HOURS. TWO DENTS WERE FOUND ON THE PIPELINE AT THE 12:00 AND 1:00 O'CLOCK POSITIONS. THE LEAK RESULTED FROM A CRACK LOCATED BETWEEN THEDENTS. AN 18-INCH SLEEVE WAS INSTALLED, AND THE PIPELINE WAS RESTARTED AT 0706 HOURS ON MAY 18, 1996.THE FINAL CLEAN-UP WAS COMPLETED ON MAY 24, 1996.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.A. COX

4048412296
Telephone no. *(including area code)*

Jun. 20, 1996
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jul. 29, 1996
No. 7000-1 **(DOT)**
19960116

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **06** *(day)* **26** *(year)* **1996**
2) Hour: *(24 hour clock)* **2354**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **SC** **GREENVILLE** **SIMPSONVILLE**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
NEAR GREENVILLE, S.C., IN THE REEDY RIVER

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1962**

PART D - CAUSE OF ACCIDENT

● corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 26,899,360

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **DIESEL FUEL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **22,800** Barrels spilled **21,472** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 36 2) Wall thickness *(inches)* 0.28

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ● Below ground ○ Above ground

6) Maximum operating pressure *(psig)* 374

7) Pressure at time and location of accident *(psig)* 399

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 803

11) Date of latest test *(month)* 0 *(day)* _____ *(year)* 1963

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
● yes ○ no

3) Facility under cathodic protection?
● yes ○ no

4) Type of corrosion
○ galvanic ● other *(specify)*
GENERAL CORR. PITTING COR

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

AFTER RUNNING AN INTERNAL INSPECTION TOOL TO IDENTIFY CORROSION AND MECHANICAL DAMAGE IN COLONIAL PIPELINE COMPANY'S 36-INCH DIAMETER PIPELINE (LINE 2) INMARCH OF 1996, THE PIGGING FIRM AND COLONIAL PERSONNEL SCANNED THE DATA ANDDISCOVERED A LOCATION WHICH APPEARED TO HAVE EXTENSIVE CORROSION. THE LOCATIONWAS INVESTIGATED ON APRIL 4, 1996, AND FOUND TO BE IN THE REEDY RIVER. THEPIPELINE PRESSURE WAS REDUCED, AND A SAFTEY-RELATED CONDITION REPORT NO 1-96,WAS FILED WITH THE OFFICE OF PIPELINE SAFETY. A PROJECT TO PERMANENTLY REPLACETHE RIVER CROSSING WAS IMMEDIATELY INITIATED AND SCHEDULED. AN APRIL ATTEMPTTO TEMPORARILY REPAIR THE LOCATION UNTIL THE PERMANENT REPAIR SCHEDULED FORJULY COULD BEGIN WAS INITIATED, BUT LATER ABANDONED DUE TO POTENNTIAL UNSAFEWORKING CONDITIONS AT THE SITE. DURING THE CLOSE OUT OF A DELIVERY AT ATLANTAJUNCTION AND A SUBSEQUENT RATE INCREASE TO LINE 2 NORTH OF ATLANTA, THECONTROLLER EXPERIENCED A FAILURE WHICH PREVENTED GASTONIA STATION FROMSTARTING. A SUBSEQUENT PRESSURE INCREASE CAUSED SIMPSONVILLE STATION TOSHUTDOWN. THE PRESSURE SURGE FROM SIMPSONVILLE STATION SHUTTING DOWN CAUSEDTHE CORRODED SECTION OF PIPE IN THE REEDY RIVER TO RUPTURE. THE CONTROLLERSHUT THE PIPELINE DOWN AND DISPATCHED PERSONNEL TO INVESTIGATE SIMPSONVILLESTATION AND THE REEDY RIVER. PERSONNEL AT THE REEDY RIVER REPORTED DIESEL FUELON THE RIVER AT 0215 EDT ON JUNE 27, 1996. THE NATIONAL RESPONSE CENTER WASNOTIFIED AT 0235

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.A. COX

4048412296
Telephone no. *(including area code)*

Jul. 29, 1996
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Dec. 06, 1996
No. 7000-1 **(DOT)**
19960180

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ○ yes ● no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **11** *(day)* **05** *(year)* **1996**
2) Hour: *(24 hour clock)* **937**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **TN** **RUTHERFORD** **MURFREESBORO**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
SEE ATTACHED

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ● incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
○ other (specify)_____

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 6,987,365

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **DIESEL FUEL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **2,017** Barrels spilled **924** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 8 2) Wall thickness *(inches)* 0.19

3) SMYS *(psi)* 1,830 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 1,318

7) Pressure at time and location of accident *(psig)* 1,820

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,649

11) Date of latest test *(month)* 12 *(day)* _____ *(year)* 1963

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)* _____

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

IT IS ESTIMATED THAT 2017 BBLS. OF LOW SULFUR DIESEL FUEL SPILLED FROM THE PIPELINE, MOST OF IT FLOWING THROUGH A SINKHOLE INTO THE SUBSURFACE WATER SYSTEM. PROTECTIVE BOMBING WAS DEPLOYED AT FIVE SITES ALONG THE NEARBY MIDDLE FORK OF THE STONE RIVER AND LONG CREEK. THERE HAS BEEN NO INDICATION OF IMPACT TO THE RIVERS OF CREEKS. THE PIPE RUPTURE WAS LOCATED IN A 65 FOOT PIECE OF 85/8 INCH O.D., .188 WT., API5LX-Z42. THE ENTIRE JOINT WAS REPLACED WITH NEW .322 INCH WT.,API5LX-X42 STEEL PIPE. A SECTION OF THE FAILED JOINT CONTAININGTHE RUPTURE WAS SHIPPED TO A METALLURGICAL LABORATORY FOR FAILURE ANALYSIS. THE PIPELINE WAS RESTARTED WITH THE U.S. OFFICE OF PIPELINE SAFETY APPROVAL AT 1437 ON NOVEMBER 6TH, AT A REDUCED LINE PRESSURE. A REVIEW OF THE EVENTS RELATING TO THE FAILURE INDICATED THAT THE CONTROLLER ATTEMPTED UNSUCESSFULLY TO OPEN A CLOSED BLOCK VALVE AT MURFREESBORO. THIS RESULTED IN OVER PRESSURIZATION OF THE LINE AND THE SUBSEQUENT RUPTURE THAT WAS LATER ESTIMATED TO HAVE OCCURED AT 0937 EST. THE ENTIRE INCIDENT IS STILL UNDER INVESTIGATION. A WATER WELL SAMPLING AND ANALYSIS PROGRAM WAS ESTABLISHED TO ENSURE THAT THE RESIDENTS NEAR THE LEAK SITE WOULD NOT BE EXPOSED TO A HEALTH THREAT FROM POTENTIALLY IMPACTED WATER WELLS. AS A PRECAUTION, BOTTLED WATER HAS BEEN INSTALLED IN AND AROUND THE LEAK SITE TO IDENTIFY THE EXTENT OF SUBSURFACE FREE PRODUCT MIGRATION. AS OF DEC.4, 1996, APPROX 493 BBLS. OF PRODUCT HAVE BEEN RECOVEREDFROM THE WELLS. PRODUCT RECOVERY AND SOIL REMED

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

JA COX

4048412296
Telephone no. *(including area code)*

Dec. 06, 1996
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jul. 07, 1997
No. 7000-1 **(DOT)**
19970116

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **05** *(day)* **20** *(year)* **1997**
2) Hour: *(24 hour clock)* **1100**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **SC** **SPARTANBURG**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
SEE ATTACHED SKETCH

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
● other (specify) **BUCKLE IN LINE PIPE**

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 50,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ● Petroleum or Petroleum product ○ HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **55** Barrels spilled **55** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 36 2) Wall thickness *(inches)* 0.31

3) SMYS *(psi)* 52,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 275

7) Pressure at time and location of accident *(psig)* 209

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 698

11) Date of latest test *(month)* 8 *(day)* _____ *(year)* 1963

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON MAY 20, 1997 AT 11:00 AM WHILE PERFORMING A PIG DIG ON LINE NO.2MAINTENANCE PERSONNEL NOTICED SATUREATED COATING ON THE LINE. THE CONTROLLERWAS NOTIFIED AT 11:05 AM AND THE LINE WAS SHUTDOWN AND ISOLATED UPON CLOSERINVESTIGATION , A 1.5 - INCH CRACK WAS FOUND IN THE CREASE OF A BUCKLE. THEPRODUCT WAS CONTAINED AND CONTAMINATED SOIL WAS STOCKPILED ON A PLASTIC SHEET.THE REPAIR WAS ACCOMPLISHED BY THE INSTALLATION OF A THREE FT. LONG FULLENCIRCLEMENT WELDED REPAIR SLEEVE OVER THE BUCKLE. RECOVERY AND MONITORINGWELLS WERE INSTALLED THE WEEK OF JUNE 2 AND RECOVERY SYSTEM WAS INSTALLED THEWEEK OF JUNE 9. ON JUNE 67, 1997, THE REVISED ESTIMATE EXCEEDED THE PART 19550,000 REPORTING LIMIT AND THE NATION RESPONSE CENTER WAS NOTIFIED AT 1406.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.A. COX

4048412296
Telephone no. *(including area code)*

Jul. 07, 1997
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jan. 27, 1998
No. 7000-1 **(DOT)**
19980020

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
_____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ○ yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **12** *(day)* **09** *(year)* **1997**
2) Hour: *(24 hour clock)* **1235**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **NC** **GUILFORD** **GREENSBORO**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
GREENSBORO JUNCTION TANK NO.836 411 GALLIMORE DAIRY RD. GREENSBORO, NC 27409

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
○ line pipe ● tank farm ○ pump station
2) Item involved: ○ pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ● tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
● other (specify) **CRACK IN TANK BOTTOM**

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 250,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **100** Barrels spilled **46** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 0 2) Wall thickness *(inches)* 0

3) SMYS *(psi)* _____ 4) Type of joint: ○ welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ○ Above ground

6) Maximum operating pressure *(psig)* _____

7) Pressure at time and location of accident *(psig)* _____

8) Had there been a pressure test on system?
○ yes ○ no

9) Duration of test *(hrs)* _____

10) Maximum test pressure *(psig)* _____

11) Date of latest test *(month)* 0 *(day)* _____ *(year)* 0

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

_____

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

AT APPROX. 12:35 ON DECEMBER 9, 1997, A GREENSBORO JUNCTION CONTRACTORDISCOVERED PETROLEUM PRODUCT IN AN OPEN PIT IN THE AREA BETWEEN THE LAGOON ANDTHE GASOLINE MANIFOLD. THE CONTRACTOR NOTIFIED ENVIRONMENTAL PERSONNELIMMEDIATELY. UPON INVESTIGATION, IT WAS DETERMINED THAT THERE WERE 6-8" OFGASOLINE ON TOP OF THE GROUNDWATER. ENVIROMENTAL PERSONNEL NOTIFIED PROJECTPERSONNEL TO BEGIN CLEAN-UP. FURTHER ASSESSMENT OF THE AREA INDICATED THATPRODUCT WAS COMING FROM TANK 836. OPERATION PERSONNEL BEGAN EMPTYING SUSPECTTANK. THE DISTRICT ENVIRONMENTAL PROJECT MANAGER WAS NOTIFIED AT APPOXIMATELY16:40. THE NC DEPARTMENT OF EMERGENCY MANAGEMENT WAS NOTIFIED AT 17:05.GUILFORD COUNTY EMERGENCY MANAGEMENT WAS CONTACTED BY STATE AND COUNTYPERSONNEL CALLED COLONIAL AT 18:15. THE NRC WAS NOTIFIED AT APPROX. 18:35.THE ORIGINAL VOLUME IN PIT WAS ESTIMATED TO BE AROUND 200 GALLONS. FURTHERINVESTIGATION DETERMINED LEAK TO BE GREATER THAN 55 BBLS. REMEDIATION ISONGOING.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.A. COX, CODES AND STANDARDS LEADER

4048412296
Telephone no. *(including area code)*

Jan. 27, 1998
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date

No. 7000-1 **(DOT)**
19980060

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**

2) Principal business address _____

_____
(city) *(state)* *(ZIP code)*

3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **03** *(day)* **30** *(year)* **1998**

2) Hour: *(24 hour clock)* **1605**

3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **GA** **FULTON** **ATLANTA**

4) If offshore, give offshore coordinates _____

5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)

6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*

USGS MAP ATTACHED

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station

2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld

○ other *(specify)* _____

3) Year item installed **1978**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
● other (specify) **BUCKLE WITH CRACK**

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees

2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 4,041,136

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **GASOLINE**

2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL

3) Estimated amount of commodity involved: **920** Barrels spilled **413** Barrels recovered

4) Was there an explosion? ○ yes ● no

5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 40 2) Wall thickness *(inches)* 0.34

3) SMYS *(psi)* 743 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 594

7) Pressure at time and location of accident *(psig)* 375

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 1,032

11) Date of latest test *(month)* 1 *(day)* _____ *(year)* 1978

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
● yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
- ○ Damage by operator or its contractor
- ○ Damage by others
- ○ Damage by natural force
- ○ Landslide
- ○ Subsidence
- ○ Washout
- ○ Frostheave
- ○ Earthquake
- ○ Ship anchor
- ○ Mudslide
- ○ Fishing operations
- ○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

THE FAILURE RESULTED FROM A BUCKLE ON THE TOP HALF OF THE PIPE. A 10-FOOTSECTION OF PIPE CONTAINING THE BUCKLE WAS CUT FROM THE LINE AND PRE-TESTEDSECTION OF 40" 0.500 W.T. API 5L-X52 PIPE WAS INSTALLED. THE PIPELINE WASRETURNED TO SERVICE AT 1607 ON 4/4/98.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

S E GILLIAM

Telephone no. *(including area code)* _____ Date _____

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jul. 01, 1999
No. 7000-1 **(DOT)**
19990096

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address _____
(city) *(state)* *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **02** *(day)* **10** *(year)* **1999**
2) Hour: *(24 hour clock)* **102**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **TN** **KNOXVILLE**
4) If offshore, give offshore coordinates _____
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
NEAR HENLEY STREET BRIDGE AT PITNER PL AND GOOSE CREEK, KNOXVILLE, TN

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ○ pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)* _____
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
● other (specify) **UNDER INVESTIGATION**

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 6,900,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ● Petroleum or Petroleum product ○ HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **1,275** Barrels spilled **1,048** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 0 2) Wall thickness *(inches)* 0.25

3) SMYS *(psi)* 42,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 521

7) Pressure at time and location of accident *(psig)* 90

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 8

10) Maximum test pressure *(psig)* 720

11) Date of latest test *(month)* 2 *(day)* _____ *(year)* 1995

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
○ Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON 2/10/99 AT 02:30 LINE # 18 BETWEEN KNOXVILLE DELIVERY AND EAST KNOXVILLE DELIVERY WAS STARTED TO MAKE A NORMAL DELIVERY. NO FLOW RATE AT EAST KNOXVILLE WAS OBSERVED AND THE CONTROL CENTER WAS NOTIFIED. THE CONTROL CENTER INSTRUCTED THE KNOXVILLE OPERATOR TO DIVERT THE STREAM BACK TO KNOXVILLE DELIVERY. AT 4:00 A CPC EMPLOYEE ARRIVED AT EAST KNOXVILLE D.F AND CHECKED THE FACILITY YARD AND FOUND NO EVIDENT PROBLEMS. AT 04:20 THE EAST KNOXVILLE D.F. TAKEOFF VALVE WAS OPENED AT KNOXVILLE TO RESUME DELIVERY AT EAST KNOXVILLE D.F. THE OPERATOR AT KNOXVILLE DELIVERY, EAST KNOXVILLE D.F., AND CONTROLLER REMAINED ON THE PHONE MONITORING PRESSURES AND FLOW RATES. THE SENIOR CONTROLLER RECEIVED A CALL FROM A KNOXVILLE FIRE DEPARTMENT AND INFORMED THE CONTROLLER TO SHUT DOWN THE LINE BECAUSE OF REPORTED PRODUCT ON THE GROUND IN KNOXVILLE. THE CONTROLLERWAS IN THE PROCESS OF SHUTTING DOWN THE LINE AND DELIVERY WHEN THE CALL FROM THE FIRE DEPRATMENT CAME IN . THE LOW FLOW RATE AND OSCILLATING CONTROLL VALVE AT EAST KNOXVILLE WAS FURTHER INDICATION WE HAD A LEAK AND THE FIRE DEPARTMENT HAD FOUND IT. AT 4:30 THE CONTROLLER NOTIFIED THE KNOXVILLE DELUVERY OPERATOR THAT THE KNOXVILLE FIRE DEPARTMENT HAD CALLED IN A REPORT OF A PRODUCT RELEASE. THE KNOXVILLE OPERATOR SENT A CPC EMPLYOEE TO THE SITE OF THE RELEASE AND HE CONFIRMED THE RELEASE WAS FROM COLONIALSS 10 INCH LINE. EMERGENCY RESPONSE EFFORTS WERE INITIATED. THE RELEASED PRODUCT WAS CONTAI

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

STEPHEN E GILLIAM, REGULATORY ADMINISTRATOR

4048412314
Telephone no. *(including area code)*

Jul. 01, 1999
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Jul. 03, 2001
No. 7000-1 **(DOT)**
20010075

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address **PO BOX 18855, 945 EAST PACES FERRY RD**
ATLANTA *(city)* **GA** *(state)* **-3-0326** *(ZIP code)*
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **05** *(day)* **30** *(year)* **2001**
2) Hour: *(24 hour clock)* **1130**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **NC** **ENOCHVILLE** **ROWAN**
4) If offshore, give offshore coordinates
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
SEE ATTACHED MAP

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)*
3) Year item installed **1963**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ○ outside force damage
○ malfunction of control or relief damage
● other (specify) **DENT IN LINE PIPE**

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 1,318,072

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ● HVL or ○ Non-HVL
3) Estimated amount of commodity involved: **400** Barrels spilled **264** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ● no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 36 2) Wall thickness *(inches)* 0.28

3) SMYS *(psi)* 52 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 509

7) Pressure at time and location of accident *(psig)* 198

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 637

11) Date of latest test *(month)* 7 *(day)* _____ *(year)* 1963

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
- ○ Damage by operator or its contractor
- ○ Damage by others
- ○ Damage by natural force
- ○ Landslide
- ○ Subsidence
- ○ Washout
- ○ Frostheave
- ○ Earthquake
- ○ Ship anchor
- ○ Mudslide
- ○ Fishing operations
- ○ Other _____

2) Was a damage prevention program in effect?
○ yes ○ no

3) If yes, was the program
○ "one call" ○ other _____

4) Did excavator call?
○ yes ○ no

5) Was pipeline location temporarily marked for the excavator?
○ yes ○ no

PART K - ACCOUNT OF ACCIDENT

ON MAY 23, 2001 A LANDOWNER REPORTED TO COLONIALS CONTROL CENTER A FAINT ODOR IN THEIR DRINKING WATER WELL. COLONIALS LINE NO. 1 AND LINE NO. 2 PASS THROUGH THE VICINITY OF THIS AREA. COLONIAL SENT PERSONNEL TO THE SITE SAMPLE THE WELL. AFTER LABORATORY RESULTS INDICATED TRACE LEVELS OF MTBE AND BENZENE CONTAMINATION, A SUBSURFACE INVESTIGATION OF THE AREA WAS SCHEDULED TO DETERMINE WHETHER THE PIPELINES WERE THE SOURCE. ON MAY 30, 2001, THE SUBSURFACE INVESTIGATION REVEALED FREE PETROLEUM LIQUIDS (DIESEL FUEL) IN THE SUBSURFACE. THE LINES WERE SHUT DOWN AND APPROPRIATE NOTIFICATIONS WERE MADE TO FEDERAL, STATE AND LOCAL AGENCIES. LINE NO. 2 WAS EXCAVATED IN THE AREA OF A 1991 PIG DIG. THE EXAMINATION OF THE PIPE REVEALED A CRACK IN A DENT AREA OF THE PIPE. ON MAY 30, 2001 REPAIRS TO THE PIPE WERE INITIATED AND A FULL ENCIRCLEMENT SLEEVE WAS INSTALLED AS A TEMPORARY REPAIR UNTIL THE SECTION OF PIPE IS REMOVED FOR PERMANENT REPAIR. COLONIAL ALSO CONTINUED EMERGENCY RESPONSE ACTIVITY COORDINATION WITH EPA AND STATE ON SCENE COORDINATORS TO ADDRESS ENIRONMENTAL CONCERNS. COLONIAL RESTARTED THE LINE ON MAY 31, 2001. ASSESSMENT AND REMEDIATION ACTIVITIES ARE CONTINUING.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

STEPHEN E. GILLIAM

4048412314
Telephone no. *(including area code)*

Jul. 03, 2001
Date

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OMB No. 2137-0047

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE

Report Date
Oct. 23, 2001
No. 7000-1 **(DOT)**
20010114

PART A - OPERATOR INFORMATION

1) Name of operator **2552** **COLONIAL PIPELINE CO**
2) Principal business address **3390 PEACHTREE ROAD, N.E.**
ATLANTA (city) **GA** (state) **-3-0326** (ZIP code)
3) Is pipeline interstate? ● yes ○ no

PART B - TIME AND LOCATION OF ACCIDENT

1) Date: *(month)* **01** *(day)* **09** *(year)* **1986**
2) Hour: *(24 hour clock)* **348**
3) If onshore give state *(including Puerto Rico and Washington , D.C.),* and county or city. **MD** **BALTIMORE** **BALTIMORE**
4) If offshore, give offshore coordinates
5) Did accident occur on Federal Land? ○ yes ● no
(see instructions for definition of Federal Land.)
6) Specific location *(If location is near offshore platforms, buildings or other landmarks such as highways, waterways or railroads, attach a.sketch or drawing showing relationship of accident location to these landmarks.)*
SEE ATTACHED MAP

PART C - ORIGIN OF RELEASE OF LIQUID OR VAPOR

1) Part of system involved: *(check all applicable items)*
● line pipe ○ tank farm ○ pump station
2) Item involved: ● pipe ○ valve ○ scraper trap ○ pump
○ welding fitting ○ girth weld ○ tank
○ bolted fitting ○ longitudinal weld
○ other *(specify)*
3) Year item installed **1982**

PART D - CAUSE OF ACCIDENT

○ corrosion ○ failed weld ○ incorrect operation by operator personnel
○ failed pipe ● outside force damage
○ malfunction of control or relief damage
○ other (specify)

PART E - DEATH OR INJURY

1) Number of persons killed **0**
0 Operator employees **0** Non-employees
2) Number of persons injured **0**
0 Operator employees **0** Non-employees

PART F - ESTIMATED TOTAL PROPERTY DAMAGE

$ 50,000

PART G - COMMODITY SPILLED

1) Name of commodity spilled: **FUEL OIL**
2) Classification of commodity spilled: ○ Petroleum or Petroleum product ○ HVL or ● Non-HVL
3) Estimated amount of commodity involved: **153** Barrels spilled **149** Barrels recovered
4) Was there an explosion? ○ yes ● no
5) Was there a fire? ○ yes ○ no

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Answer section H, I or J only if it applies to the particular accident being reported.

PART H - OCCURRED IN LINE PIPE

1) Nominal diameter *(inches)* 12.75 2) Wall thickness *(inches)* 0.25

3) SMYS *(psi)* 60,000 4) Type of joint: ● welded ○ flanged ○ threaded ○ coupled ○ other

5) Pipe was ○ Below ground ● Above ground

6) Maximum operating pressure *(psig)* 80

7) Pressure at time and location of accident *(psig)* 15

8) Had there been a pressure test on system?
● yes ○ no

9) Duration of test *(hrs)* 24

10) Maximum test pressure *(psig)* 100

11) Date of latest test *(month)* 10 *(day)* _____ *(year)* 1982

PART I - CAUSED BY CORROSION

1) Location of corrosion
○ internal ○ external

2) Facility coated?
○ yes ○ no

3) Facility under cathodic protection?
○ yes ○ no

4) Type of corrosion
○ galvanic ○ other *(specify)*

PART J - CAUSED BY OUTSIDE FORCE

1)
○ Damage by operator or its contractor
● Damage by others
○ Damage by natural force
○ Landslide
○ Subsidence
○ Washout
○ Frostheave
○ Earthquake
○ Ship anchor
○ Mudslide
○ Fishing operations
○ Other _____

2) Was a damage prevention program in effect?
● yes ○ no

3) If yes, was the program
● "one call" ○ other _____

4) Did excavator call?
○ yes ● no

5) Was pipeline location temporarily marked for the excavator?
○ yes ● no

PART K - ACCOUNT OF ACCIDENT

A DELIVERY TO A SHIPPER WAS MADE ON 12/10/85 AND THE DELIVERY LINE WAS SECURED UPON COMPLETION OF THE TRANSACTION. SHORTLY AFTER INITIATING THE NEXT DELIVERY ON 01/09/86 A SHIPPER REPRESENTATIVE TELEPHONED TO ADVISE THAT FUEL OIL WAS BUBBLING OUT OF THE GROUND INSIDE HIS TERMINAL IN THE VICINITY OF THE DELIVERY LINE. UPON EXCAVATION IT WAS FOUND THAT THE SOURCE OF THE PRODUCT WAS THREE HOLES IN THE PIPE CAUSED BY A BACKHOE BUCKET. THE SHIPPER HAD INSTALLED A NEW DRIVEWAY TO HIS LOADING RACK AROUND DECEMBER 15, 1985, AND IN THE PROCESS OF EXCAVATING FOR THE FOUNDATION APPARENTLY DAMAGED THE PIPE AND BACKFILLED THE EXCAVATION WITHOUT NOTICE TO COLONIAL. MOST OF THE 153 BBLS. OF FUEL OIL LOST FROM THE DELIVERY LINE FLOWED INTO A STORM SEWER WHERE 149 BBLS. WERE RECOVERED AND RETURNED TO THE SYSTEM LEAVING A NET LOSS OF 4 BBLS. IMMEDIATE TELEPHONE NOTICE WAS MADE TO THE BALTIMORE FIRE DEPARTMENT, MARYLAND DEPARTMENT OF NATURAL RESOURCES, AND THE NATIONAL RESPONSE CENTER. THE FIRE DEPARTMENT, STATE OF MARYLAND, AND U.S. COAST GUARD RESPONDED TO THE SITE. REPAIR OF THE DAMAGED DELIVERY LINE REQUIRED REMOVAL OF 14 6" OF 12-3/4" DIA., 0.250" WT, X-60 PIPE AND REPLACEMENT WITH A LIKE AMOUNT OF PRE HYDROSTATICALLY TESTED PIPE. TIE-IN WELDS WERE X-RAYED.

NAME AND TITLE OF OPERATOR OFFICIAL FILING THIS REPORT

J.S. SORROW, SR.

4042611470
Telephone no. *(including area code)*

Oct. 23, 2001
Date

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NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $25,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $500,000 as provided in 49 USC 60122

Form Approved
OMB No. 2137-0047

U.S. Department of Transportaion
Research and Special Programs
Administration

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date APR 15,2003

No. 20030147 -- 1239
(DOT Use Only)

INSTRUCTIONS

Important: ***Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions you can obtain one from the Office Of Pipeline Safety Web Page at http://ops.dot.gov***

PART A - GENERAL REPORT INFORMATION

check: ☒ **Original Report** ☐ **Supplemental Report** ☐ **Final Report**

1. a. Operator's OPS 5-digit Identification Number (if know) / 2552 /
2. b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if know) / /

c. Name of Operator COLONIAL PIPELINE CO

d. Operator street address 1185 SANCTUARY PARKWAY, SUITE 100

e. Operator address ALPHARETTA FULTON GA 30004-4738
City, County, State and ZIP Code

IMPORTANT: IF THE SPILL IS SMALL, THAT IS, THE AMOUNT IS AT LEAST 5 GALLONS BUT IS LESS THAN 5 BARRELS, COMPLETE THIS PAGE ONLY, UNLESS THE SPILL IS TO WATER AS DESCRIBED IN 49 CFR §195.52(A)(4) OR IS OTHERWISE REPORTABLE UNDER §195.50 AS REVISED IN CY 2001.

2. Time and date of the accident

hr.	month	day	year
1733	03	16	2003

3. Location of accident
(If offshore, do not complete a through d See Part C.1)

a. Latitude: 38 41 24 Longitude: 77 33 0
(If not available, see instructions for how to provide specific location)

b. NOKESVILLE PRINCE WILLIAM
City and County or Parish

c. VA 20181
State and Zip Code

d. Mile post/valve station ○ or Survey Station no. ●
(whichever gives more accurate location)
9882+87

4. Telephone report

NRC Report Number	month	day	year
639632	03	16	2003

5. Losses (Estimated)

Public/Community Losses reimbursed by operator:

Public/private property damage	$ 0
Cost of emergency response phase	$ 75,000
Cost of environmental remediation	$ 0
Other Costs	$ 0
(describe)	

Operator Losses:

Value of product lost	$ 100
Value of operator property damage	$ 0
Other Costs	$ 475,000
(describe)	REPAIR AND ENVIRONMENTAL RESTORATION
Total Costs:	$ 550,100

6. Commodity Spilled ● Yes ○ No
(If Yes, complete Parts a through c where applicable)

a. Name of commodity spilled GASOLINE

b. Classification of commodity spilled:
- ○ HVLs/other flammable or toxic fluid which is a gas at ambient conditions
- ○ CO_2 or other non-flammable, non-toxic fluid which is a gas at ambient conditons
- ● Gasoline, diesel, fuel oil or other petroleum product which is a liquid at ambient conditions
- ○ Crude oil

c. Estimated amount of commodity involved :
- ● **Barrels**
- ○ **Gallons (check only if spill is less than one barrel)**

Amounts :
Spilled : 1
Recovered: 1

CAUSES FOR SMALL SPILLS ONLY *(5 gallons to under 5 barrels)* :

(For large spills [5 barrels or greater] see Part H)

○ **Corrosion** ○ **Natural Forces** ○ **Excavation Damage** ○ **Other Ouside Force Damage**
● **Materal and/or Weld Failures** ○ **Equipment** ○ **Incorrect Operation** ○ **Other**

PART B - PREPARER AND AUTHORIZED SIGNATURE

STEPHEN E. GILLIAM
(type or print) Preparer's Name and Title

(678) 762-2314
Area Code and Telephone Number

SGILLIAM@COLPIPE.COM
Preparer's E-mail Address

(678) 762-2464
Area Code and Facsimile Number

Authorized Signature | (type or print) Name and Title | Date | Area Cod and Telephone Number

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PART C - ORIGIN OF THE ACCIDENT *(Check all that apply)*

1. Additional location information
   a. Line segment name or ID **LINE 4**
   b. Accident on Federal land other than Outer Continental Shelf ○ Yes ● No
   c. Is pipeline interstate? ● Yes ○ No

Offshore: ○ Yes ● No (*comple d if offshore*)
d. Area _____ Block # _____
State /____/ or Outer Continental Shelf ☐

2. Location of system involved (check all that apply)
   ☐ Operator's Property
   ☒ Pipeline Right of Way
   ☒ High Consequence Area (HCA)?
   Describe HCA **OPA & ECO USA**

3. Part of system involved in accident
   ○ Above Ground Storage Tank
   ○ Cavern or other below ground storage facility
   ○ Pump/meter station; terminal/tank farm piping and equipment, including sumps
   ○ Other Specify: _____

   ● Onshore **pipeline**, including valve sites
   ○ Offshore **pipeline**, including platforms

*if failure occurred on **pipeline**, complete items a - g:*

4. Failure occurred on
   ● Body of Pipe ○ Pipe Seam ○ Scraper Trap
   ○ Pump ○ Sump ○ Joint
   ○ Component ○ Valve ○ Metering Facility
   ○ Repair Sleeve ○ Welded Fitting ○ Bolted Fitting
   ○ Girth Weld
   ○ Other *(specify)* _____

Year the component that failed was installed: /**1963**/

5. Maximum operating pressure (MOP)
   a. Estimated pressure at point and time of accident: **230** *PSIG*
   b. MOP at time of accident: **480** *PSIG*
   c. Did an overpressurization occur relating to the accident? ○ Yes ● No

a. Type of leak or rupture
   ● Leak: ○ Pinhole ● Connection Failure *(complete sec. H5)*
   ○ Puncture, diameter *(inches)* _____
   ○ Rupture: ○ Circumferential - Separation
   ○ Longitudinal - Tear/Crack, length *(inches)* _____
   Propagation Length, total, both sides *(feet)* _____
   ○ N/A
   ○ Other _____

b. Type of block valve used for isolation of immediate section:
   Upstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve
   Downstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve

c. Length of segment isolated **2** ft
d. Distance between valves **2** ft
e. Is segment configured for internal inspection tools? ● Yes ○ No
f. Had there been an in-line inspection device run at the point of failure? ● Yes ○ No ○ Don't Know
   ○ Not Possible due to physical constraints in the system

g. If Yes, type of device run *(check all that apply)*

☒	High Resolution Magnetic Flux tool	Year run: **1998**
☐	Low Resolution Magnetic Flux tool	Year run:
☐	UT tool	Year run:
☐	Geometry tool	Year run:
☐	Caliper tool	Year run:
☐	Crack tool	Year run:
☐	Hard Spot tool	Year run:
☐	Other tool	Year run:

PART D - MATERIAL SPECIFICATION

1. Nominal pipe size *(NPS)* /**32**/ in.
2. Wall thickness **.28**/ in.
3. Specification **5L** SMYS /**913**/
4. Seam type **SAW**
5. valve type _____
6. *Manufactured by* **NATIONAL TUBE** *in year* /**1963**/

PART E - ENVIRONMENT

1. *Area of accident*
   ○ Under pavement ○ In open ditch
   ● Underground ○ Above ground
   ○ Inside/under building ○ Under water
   ○ Other _____

2. *Depth of cover:* **42** *inches*

PART F - CONSEQUENCES

1. Consequences *(check and complete all that apply)*

a.	Fatalities	Injuries
Number of operator employees:	0	0
Contractor employees working for operator:	0	0
General public:	0	0
Totals:	0	0

b. Was pipeline/segment shutdown due to leak? ● Yes ○ No
If Yes, how long? **3** days **3** hours **45** minutes

c. Product ignited ○ Yes ● No d. Explosion ○ Yes ● No
e. ☐ **Evacuation** *(general public only)* /_____/ people
Reason for Evacuation:
○ Precautionary by company
○ Evacuation required or initiated by public official

f. Elapsed time until area was made safe:
/____/ hr. /____/ min.

2. Environmental Impact
a. Wildlife Impact: Fish/aquatic ○ Yes ● No; Bird ○ Yes ● No; Terrestrial ○ Yes ● No
b. Soil Contamination ● Yes ○ No
If Yes, estimated number of cubic yards: **500**
c. Long term impact assessment performed: ● Yes ○ No
d. Anticipated remediation ● Yes ○ No

e. Water Contamination: ○ Yes ● No *(If Yes, provide the following)*
Amount in water _____ barrels
Ocean/Seawater ○ No ○ Yes
Surface ○ No ○ Yes
Groundwater ○ No ○ Yes
Drinking water ○ No ○ Yes *(If Yes, check below.)*
○ Private well ○ Public water intake

If Yes, Check all that apply: ☐ Surface water ☐ Groundwater ☒ Soil ☐ Vegetation ☐ Wildlife

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PART G - LEAK DETECTION INFORMATION

1. Computer based leak detection capability in place? ○ Yes ● No
2. Was the release intially detected by? (check one):
   - ○ CPM/SCADA-based system with leak detection
   - ○ Static shut-in test or other pressure or leak test
   - ○ Local operating personnel, procedures or equipment
   - ○ Remote operating personnel, including controllers
   - ○ Air patrol or ground surveillance
   - ● A third party ○ Other (specify) _____
3. Estimated leak duration days_____ hours __6__

PART H - APPARENT CAUSE

Important: There are 25 numbered causes in this Part H. Check the box corresponding to the primary cause of the accident. Check one circle in each of the supplemental categories corresponding to the cause you indicate. Secc the instructions for guidance.

H1 - CORROSION

1. ○ External Corrosion
2. ○ Internal Corrosion

(Complete items a - e where applicable.)

a. Pipe Coating
- ○ Bare
- ○ Coated

b. Visual Examination
- ○ Localized Pitting
- ○ General Corrosion
- ○ Other _____

c. Cause of Corrosion
- ○ Galvanic
- ○ Atmospheric
- ○ Stray Current
- ○ Microbiological
- ○ Cathodic Protection Disrupted
- ○ Stress Corrosion Cracking
- ○ Selective Seam Corrosion
- ○ Other _____

d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?
○ No ○ Yes, Year Protection Started: /_____/

e. Was pipe previously damaged in the area of corrosion?
○ No ○ Yes => Estimated time prior to accident: /____/ years /____/ months Unknown ☐

H2 - NATURAL FORCES

3. ○ Earth Movement => ○ Earthquake ○ Subsidence ○ Landslide ○ Other _____
4. ○ Lightning
5. ○ Heavy Rains/Floods => ○ Washouts ○ Flotation ○ Mudslide ○ Scouring ○ Other _____
6. ○ Temperature => ○ Thermal stress ○ Frost heave ○ Frozen components ○ Other _____
7. ○ High Winds

H3 - EXCAVATION DAMAGE

8. ○ Operator Excavation Damage (including their contractors/Not Third Party)
9. ○ Third Party *(complete a-f)*
   - a. Excavator group
     ○ General Public ○ Government ○ Excavator other than Operator/subcontractor
   - b. Type: ○ Road Work ○ Pipeline ○ Water ○ Electric ○ Sewer ○ Phone/Cable
     ○ Landowner-not farming related ○ Farming ○ Raildroad
     ○ Other liquid or gas transmission pipeline-operator or their contractor
     ○ Nautical Operations ○ Other _____
   - c. Excavation was: ○ Open Trench ○ Sub-strata (boring, directional drilling, etc...)
   - d. Excavation was an ongoing activity (Month or longer) ○ Yes ○ No If Yes, Date of last contact /____/
   - e. Did operator get prior notification of excavation activity?
     ○ Yes; Date received: /____/ mo. /_____/ day /____/ yr. ○ No
     Notification received from: ○ One Call System ○ Excavator ○ Contractor ○ Landowner
   - f. Was pipeline marked as result of location request for excavation? ○ No ○ Yes (If Yes, check applicable items i - iv)
     - i. Temporary markings: ○ Flags ○ Stakes ○ Paint
     - ii. Permanent markings: ○ Yes ○ No
     - iii. Marks were (check one) : ○ Accurate ○ Not Accurate
     - iv. Were marks made within required time? ○ Yes ○ No

H4 - OTHER OUTSIDE FORCE DAMAGE

10. ○ Fire/Explosion as primary cause of failure => Fire/Explosion cause: ○ Man Made ○ Natural
11. ○ Car, truck or other vehicle not relating to excavation activity damaging pipe
12. ○ Rupture of Previously Damaged Pipe
13. ○ Vandalism

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H5 - MATERIAL AND/OR WELD FAILURES

Material

14. ● Body of Pipe => ○ Dent ○ Gouge ○ Bend ○ Arc Burn ● Other DENT W/CRACK

15. ○ Component => ○ Valve ○ Fitting ○ Vessel ○ Extruded Outlet ○ Other _____

16. ○ Joint => ○ Gasket ○ O-Ring ○ Threads ○ Other _____

Weld

17. ○ Butt => ○ Pipe ○ Fabrication ○ Other _____

18. ○ Fillet => ○ Branch ○ Hot Tap ○ Fitting ○ Repair Sleeve ○ Other _____

19. ○ Pipe Seam => ○ LF ERW ○ DSAW ○ Seamless ○ Flash Weld
○ HF ERW ○ SAW ○ Spiral ○ Other _____

Complete a-g if you indicate **any** *cause in part H5.*

a. Type of failure:
○ Construction Defect => ○ Poor Workmanship ○ Procedure not followed ○ Poor Construction Procedures
● Material Defect

b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site? ○ Yes ● No

c. Was part which leaked pressure tested before accident occurred? ● Yes, complete d-g ○ No

d. Date of test: / 1993 / yr. / / mo. / / day

e. Test medium: ● Water ○ Inert Gas ○ Other _____

f. Time held at test pressure: / 8 / hr.

g. Estimated test pressure at point of accident: 859 *PSIG*

H6 - EQUIPMENT

20. ○ Malfunction of Control/Relief Equipment => ○ Control valve ○ Instrumentation ○ SCADA ○ Communications
○ Block valve ○ Relief valve ○ Power failure
○ Other _____

21. ○ Threads Stripped Broken Pipe Coupling => ○ Nipples ○ Valve Threads ○ Dresser Couplings
○ Other _____

22. ○ Seal Failure => ○ Gasket ○ O-Ring ○ Seal/Pump Packing
○ Other _____

H7 - INCORRECT OPERATION

23. ○ Incorrect Operation

a. Type ○ Inadequate Procedures ○ Inadequate Safety Practices ○ Failure to Follow Procedures
○ Other _____

b. Number of employees involved who failed a post-accident test: drug test: / / alcohol test / /

H8 - OTHER

24. ○ Miscellaneous, *describe:* _____

25. ○ Unknown
○ Investigation Complete ○ Still Under Investigation (*Submit a supplemental report when investigation is complete*)

PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

(Attach additional sheets as necessary)

Refer to ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

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ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

ON MARCH 16, 2003, A MOTORIST NOTICED STAINING AND DEAD VEGETATION ON OUR RIGHT OF WAY JUST DOWNSTREAM OF WHERE WE CROSS RT. 28 IN NOKESVILLE, VA. HE CALLED COLONIAL'S FAIRFAX DELIVERY FACILITY AT 16:15 TO REPORT HIS FINDING. THE FAIRFAX OPERATOR INITIATED THE APPROPRIATE RESPONSE PROCEDURES.

THE INVESTIGATION OF THE PIPELINE FAILURE IS ONGOING TO DETERMINE THE CASUE OF THE FAILURE. A CRACK HAD DEVELOPED IN A BOTTOM SIDE DENT. A PIPELINE REPAIR SLEEVE WAS INSTALLED. ADEQUATE SEDIMENT AND STORMWATER RUNOFF CONTROLS WERE PUT IN PLACE, RAIN WATER REMOVED DURING EXCAVATION WAS TREATED ON-SITE THROUGH CARBON VESSELS.

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NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $25,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $500,000 as provided in 49 USC 60122

Form Approved
OMB No. 2137-0047

U.S. Department of Transportaion
Research and Special Programs
Administration

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date APR 15,2003

No. 20030147 -- 1240
(DOT Use Only)

INSTRUCTIONS

Important: ***Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions you can obtain one from the Office Of Pipeline Safety Web Page at http://ops.dot.gov***

PART A - GENERAL REPORT INFORMATION

check: ☐ **Original Report** ☒ **Supplemental Report** ☐ **Final Report**

1. a. Operator's OPS 5-digit Identification Number (if know) / 2552 /
2. b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if know) / /

c. Name of Operator COLONIAL PIPELINE CO

d. Operator street address 1185 SANCTUARY PARKWAY, SUITE 100

e. Operator address ALPHARETTA FULTON GA 30004-4738
City, County, State and ZIP Code

IMPORTANT: IF THE SPILL IS SMALL, THAT IS, THE AMOUNT IS AT LEAST 5 GALLONS BUT IS LESS THAN 5 BARRELS, COMPLETE THIS PAGE ONLY, UNLESS THE SPILL IS TO WATER AS DESCRIBED IN 49 CFR §195.52(A)(4) OR IS OTHERWISE REPORTABLE UNDER §195.50 AS REVISED IN CY 2001.

2. Time and date of the accident

hr.	month	day	year
1733	03	16	2003

3. Location of accident
(If offshore, do not complete a through d See Part C.1)

a. Latitude: 38 41 24 Longitude: 77 33 0
(If not available, see instructions for how to provide specific location)

b. NOKESVILLE PRINCE WILLIAM
City and County or Parish

c. VA 20181
State and Zip Code

d. Mile post/valve station ○ or Survey Station no. ●
(whichever gives more accurate location)
9882+87

4. Telephone report

NRC Report Number	month	day	year
639632	03	16	2003

5. Losses (Estimated)

Public/Community Losses reimbursed by operator:

Public/private property damage	$ 0
Cost of emergency response phase	$ 75,000
Cost of environmental remediation	$ 0
Other Costs	$ 0
(describe)	

Operator Losses:

Value of product lost	$ 100
Value of operator property damage	$ 0
Other Costs	$ 475,000
(describe)	REPAIR AND ENVIRONMENTAL RESTORATION
Total Costs:	$ 550,100

6. Commodity Spilled ● Yes ○ No
(If Yes, complete Parts a through c where applicable)

a. Name of commodity spilled GASOLINE

b. Classification of commodity spilled:
- ○ HVLs/other flammable or toxic fluid which is a gas at ambient conditions
- ○ CO_2 or other non-flammable, non-toxic fluid which is a gas at ambient conditons
- ● Gasoline, diesel, fuel oil or other petroleum product which is a liquid at ambient conditions
- ○ Crude oil

c. Estimated amount of commodity involved :
- ● **Barrels**
- ○ **Gallons (check only if spill is less than one barrel)**

Amounts :
Spilled : 1
Recovered: 1

CAUSES FOR SMALL SPILLS ONLY *(5 gallons to under 5 barrels)* :

(For large spills [5 barrels or greater] see Part H)

○ **Corrosion** ○ **Natural Forces** ○ **Excavation Damage** ○ **Other Ouside Force Damage**
● **Materal and/or Weld Failures** ○ **Equipment** ○ **Incorrect Operation** ○ **Other**

PART B - PREPARER AND AUTHORIZED SIGNATURE

STEPHEN E. GILLIAM
(type or print) Preparer's Name and Title

(678) 762-2314
Area Code and Telephone Number

SGILLIAM@COLPIPE.COM
Preparer's E-mail Address

(678) 762-2464
Area Code and Facsimile Number

Authorized Signature | (type or print) Name and Title | Date | Area Cod and Telephone Number

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PART C - ORIGIN OF THE ACCIDENT *(Check all that apply)*

1. Additional location information
   a. Line segment name or ID **LINE 4**
   b. Accident on Federal land other than Outer Continental Shelf ○ Yes ● No
   c. Is pipeline interstate? ● Yes ○ No

Offshore: ○ Yes ● No (*comple d if offshore*)
d. Area _____ Block # _____
State / / or Outer Continental Shelf ☐

2. Location of system involved (check all that apply)
   ☐ Operator's Property
   ☒ Pipeline Right of Way
   ☒ High Consequence Area (HCA)?
   Describe HCA **OPA & ECO USA**

3. Part of system involved in accident
   ○ Above Ground Storage Tank
   ○ Cavern or other below ground storage facility
   ○ Pump/meter station; terminal/tank farm piping and equipment, including sumps
   ○ Other Specify: _____

   ● Onshore **pipeline**, including valve sites
   ○ Offshore **pipeline**, including platforms

   *if failure occurred on **pipeline**, complete items a - g:*

4. Failure occurred on
   ● Body of Pipe ○ Pipe Seam ○ Scraper Trap
   ○ Pump ○ Sump ○ Joint
   ○ Component ○ Valve ○ Metering Facility
   ○ Repair Sleeve ○ Welded Fitting ○ Bolted Fitting
   ○ Girth Weld
   ○ Other *(specify)* _____

   Year the component that failed was installed: / **1963** /

5. Maximum operating pressure (MOP)
   a. Estimated pressure at point and time of accident: **230** *PSIG*
   b. MOP at time of accident: **480** *PSIG*
   c. Did an overpressurization occur relating to the accident? ○ Yes ● No

a. Type of leak or rupture
   ● Leak: ○ Pinhole ● Connection Failure *(complete sec. H5)*
   ○ Puncture, diameter *(inches)* _____
   ○ Rupture: ○ Circumferential - Separation
   ○ Longitudinal - Tear/Crack, length *(inches)* _____
   Propagation Length, total, both sides *(feet)* _____
   ○ N/A
   ○ Other _____

b. Type of block valve used for isolation of immediate section:
   Upstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve
   Downstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve

c. Length of segment isolated **10,834** ft
d. Distance between valves **10,834** ft
e. Is segment configured for internal inspection tools? ● Yes ○ No
f. Had there been an in-line inspection device run at the point of failure? ● Yes ○ No ○ Don't Know
   ○ Not Possible due to physical constraints in the system
g. If Yes, type of device run *(check all that apply)*
   ☒ High Resolution Magnetic Flux tool Year run: **1998**
   ☐ Low Resolution Magnetic Flux tool Year run: _____
   ☐ UT tool Year run: _____
   ☐ Geometry tool Year run: _____
   ☐ Caliper tool Year run: _____
   ☐ Crack tool Year run: _____
   ☐ Hard Spot tool Year run: _____
   ☐ Other tool Year run: _____

PART D - MATERIAL SPECIFICATION

1. Nominal pipe size *(NPS)* / **32** / in.
2. Wall thickness **281** / in.
3. Specification **5L** SMYS / **913** /
4. Seam type **SAW**
5. valve type _____
6. *Manufactured by* **NATIONAL TUBE** *in year* / **1963** /

PART E - ENVIRONMENT

1. *Area of accident*
   ○ Under pavement ○ In open ditch
   ● Underground ○ Above ground
   ○ Inside/under building ○ Under water
   ○ Other _____

2. *Depth of cover:* **42** *inches*

PART F - CONSEQUENCES

1. Consequences *(check and complete all that apply)*

a.	Fatalities	Injuries
Number of operator employees:	0	0
Contractor employees working for operator:	0	0
General public:	0	0
Totals:	0	0

b. Was pipeline/segment shutdown due to leak? ● Yes ○ No
If Yes, how long? **3** days **3** hours **45** minutes

c. Product ignited ○ Yes ● No d. Explosion ○ Yes ● No
e. ☐ **Evacuation** *(general public only)* / _____ / people
Reason for Evacuation:
○ Precautionary by company
○ Evacuation required or initiated by public official

f. Elapsed time until area was made safe:
/ / hr. / / min.

2. Environmental Impact
a. Wildlife Impact: Fish/aquatic ○ Yes ● No
Bird ○ Yes ● No
Terrestrial ○ Yes ● No
b. Soil Contamination ● Yes ○ No
If Yes, estimated number of cubic yards: **500**
c. Long term impact assessment performed: ● Yes ○ No
d. Anticipated remediation ● Yes ○ No
If Yes, Check all that apply: ☒ Surface water ☐ Groundwater ☒ Soil ☐ Vegetation ☐ Wildlife

e. Water Contamination: ● Yes ○ No *(If Yes, provide the following)*
Amount in water **0** barrels
Ocean/Seawater ○ No ○ Yes
Surface ○ No ● Yes
Groundwater ○ No ○ Yes
Drinking water ○ No ○ Yes *(If Yes, check below.)*
○ Private well ○ Public water intake

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PART G - LEAK DETECTION INFORMATION

1. Computer based leak detection capability in place? ○ Yes ● No
2. Was the release intially detected by? (check one):
   - ○ CPM/SCADA-based system with leak detection
   - ○ Static shut-in test or other pressure or leak test
   - ○ Local operating personnel, procedures or equipment
   - ○ Remote operating personnel, including controllers
   - ○ Air patrol or ground surveillance
   - ● A third party ○ Other (specify) _____
3. Estimated leak duration days 3 hours _____

PART H - APPARENT CAUSE

Important: There are 25 numbered causes in this Part H. Check the box corresponding to the primary cause of the accident. Check one circle in each of the supplemental categories corresponding to the cause you indicate. Secc the instructions for guidance.

H1 - CORROSION

1. ○ External Corrosion
2. ○ Internal Corrosion

(Complete items a - e where applicable.)

a. Pipe Coating
- ○ Bare
- ○ Coated

b. Visual Examination
- ○ Localized Pitting
- ○ General Corrosion
- ○ Other _____

c. Cause of Corrosion
- ○ Galvanic
- ○ Atmospheric
- ○ Stray Current
- ○ Microbiological
- ○ Cathodic Protection Disrupted
- ○ Stress Corrosion Cracking
- ○ Selective Seam Corrosion
- ○ Other _____

d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?
○ No ○ Yes, Year Protection Started: /_____/

e. Was pipe previously damaged in the area of corrosion?
○ No ○ Yes => Estimated time prior to accident: /____/ years /____/ months Unknown ☐

H2 - NATURAL FORCES

3. ○ Earth Movement => ○ Earthquake ○ Subsidence ○ Landslide ○ Other _____
4. ○ Lightning
5. ○ Heavy Rains/Floods => ○ Washouts ○ Flotation ○ Mudslide ○ Scouring ○ Other _____
6. ○ Temperature => ○ Thermal stress ○ Frost heave ○ Frozen components ○ Other _____
7. ○ High Winds

H3 - EXCAVATION DAMAGE

8. ○ Operator Excavation Damage (including their contractors/Not Third Party)
9. ○ Third Party *(complete a-f)*
   - a. Excavator group
     ○ General Public ○ Government ○ Excavator other than Operator/subcontractor
   - b. Type: ○ Road Work ○ Pipeline ○ Water ○ Electric ○ Sewer ○ Phone/Cable
     ○ Landowner-not farming related ○ Farming ○ Raildroad
     ○ Other liquid or gas transmission pipeline-operator or their contractor
     ○ Nautical Operations ○ Other _____
   - c. Excavation was: ○ Open Trench ○ Sub-strata (boring, directional drilling, etc...)
   - d. Excavation was an ongoing activity (Month or longer) ○ Yes ○ No If Yes, Date of last contact /____/
   - e. Did operator get prior notification of excavation activity?
     ○ Yes; Date received: /____/ mo. /_____/ day /____/ yr. ○ No
     Notification received from: ○ One Call System ○ Excavator ○ Contractor ○ Landowner
   - f. Was pipeline marked as result of location request for excavation? ○ No ○ Yes (If Yes, check applicable items i - iv)
     - i. Temporary markings: ○ Flags ○ Stakes ○ Paint
     - ii. Permanent markings: ○ Yes ○ No
     - iii. Marks were (check one) : ○ Accurate ○ Not Accurate
     - iv. Were marks made within required time? ○ Yes ○ No

H4 - OTHER OUTSIDE FORCE DAMAGE

10. ○ Fire/Explosion as primary cause of failure => Fire/Explosion cause: ○ Man Made ○ Natural
11. ○ Car, truck or other vehicle not relating to excavation activity damaging pipe
12. ○ Rupture of Previously Damaged Pipe
13. ○ Vandalism

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H5 - MATERIAL AND/OR WELD FAILURES

Material

14. ● Body of Pipe => ○ Dent ○ Gouge ○ Bend ○ Arc Burn ● Other DENT W/CRACK

15. ○ Component => ○ Valve ○ Fitting ○ Vessel ○ Extruded Outlet ○ Other _____

16. ○ Joint => ○ Gasket ○ O-Ring ○ Threads ○ Other _____

Weld

17. ○ Butt => ○ Pipe ○ Fabrication ○ Other _____

18. ○ Fillet => ○ Branch ○ Hot Tap ○ Fitting ○ Repair Sleeve ○ Other _____

19. ○ Pipe Seam => ○ LF ERW ○ DSAW ○ Seamless ○ Flash Weld
○ HF ERW ○ SAW ○ Spiral ○ Other _____

Complete a-g if you indicate **any** *cause in part H5.*

a. Type of failure:
○ Construction Defect => ○ Poor Workmanship ○ Procedure not followed ○ Poor Construction Procedures
● Material Defect

b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site? ○ Yes ● No

c. Was part which leaked pressure tested before accident occurred? ● Yes, complete d-g ○ No

d. Date of test: / 1993 / yr. / / mo. / / day

e. Test medium: ● Water ○ Inert Gas ○ Other _____

f. Time held at test pressure: / 8 / hr.

g. Estimated test pressure at point of accident: 859 *PSIG*

H6 - EQUIPMENT

20. ○ Malfunction of Control/Relief Equipment => ○ Control valve ○ Instrumentation ○ SCADA ○ Communications
○ Block valve ○ Relief valve ○ Power failure
○ Other _____

21. ○ Threads Stripped Broken Pipe Coupling => ○ Nipples ○ Valve Threads ○ Dresser Couplings
○ Other _____

22. ○ Seal Failure => ○ Gasket ○ O-Ring ○ Seal/Pump Packing
○ Other _____

H7 - INCORRECT OPERATION

23. ○ Incorrect Operation

a. Type ○ Inadequate Procedures ○ Inadequate Safety Practices ○ Failure to Follow Procedures
○ Other _____

b. Number of employees involved who failed a post-accident test: drug test: / / alcohol test / /

H8 - OTHER

24. ○ Miscellaneous, *describe:* _____

25. ○ Unknown
○ Investigation Complete ○ Still Under Investigation (*Submit a supplemental report when investigation is complete*)

PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

(Attach additional sheets as necessary)

Refer to ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

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ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

ON MARCH 16, 2003, A MOTORIST NOTICED STAINING AND DEAD VEGETATION ON OUR RIGHT OF WAY JUST DOWNSTREAM OF WHERE WE CROSS RT. 28 IN NOKESVILLE, VA. HE CALLED COLONIAL'S FAIRFAX DELIVERY FACILITY AT 16:15 TO REPORT HIS FINDING. THE FAIRFAX OPERATOR INITIATED THE APPROPRIATE RESPONSE PROCEDURES.

THE INVESTIGATION OF THE PIPELINE FAILURE IS ONGOING TO DETERMINE THE CASUE OF THE FAILURE. A CRACK HAD DEVELOPED IN A BOTTOM SIDE DENT. A PIPELINE REPAIR SLEEVE WAS INSTALLED. ADEQUATE SEDIMENT AND STORMWATER RUNOFF CONTROLS WERE PUT IN PLACE, RAIN WATER REMOVED DURING EXCAVATION WAS TREATED ON-SITE THROUGH CARBON VESSELS.

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NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $25,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $500,000 as provided in 49 USC 60122

Form Approved
OMB No. 2137-0047

U.S. Department of Transportaion
Research and Special Programs
Administration

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date APR 15,2003

No. 20030147 -- 1907
(DOT Use Only)

INSTRUCTIONS

Important: ***Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions you can obtain one from the Office Of Pipeline Safety Web Page at http://ops.dot.gov***

PART A - GENERAL REPORT INFORMATION

check: ☐ **Original Report** ☒ **Supplemental Report** ☐ **Final Report**

1. a. Operator's OPS 5-digit Identification Number (if know) / 2552 /
2. b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if know) / /

c. Name of Operator COLONIAL PIPELINE CO

d. Operator street address 1185 SANCTUARY PARKWAY, SUITE 100

e. Operator address ALPHARETTA FULTON GA 30004-4738
City, County, State and ZIP Code

IMPORTANT: IF THE SPILL IS SMALL, THAT IS, THE AMOUNT IS AT LEAST 5 GALLONS BUT IS LESS THAN 5 BARRELS, COMPLETE THIS PAGE ONLY, UNLESS THE SPILL IS TO WATER AS DESCRIBED IN 49 CFR §195.52(A)(4) OR IS OTHERWISE REPORTABLE UNDER §195.50 AS REVISED IN CY 2001.

2. Time and date of the accident

hr.	month	day	year
1733	03	16	2003

3. Location of accident
(If offshore, do not complete a through d See Part C.1)

a. Latitude: 38 41 24 Longitude: 77 33 0
(If not available, see instructions for how to provide specific location)

b. NOKESVILLE PRINCE WILLIAM
City and County or Parish

c. VA 20181
State and Zip Code

d. Mile post/valve station ○ or Survey Station no. ●
(whichever gives more accurate location)
9882+87

4. Telephone report

NRC Report Number	month	day	year
639632	03	16	2003

5. Losses (Estimated)

Public/Community Losses reimbursed by operator:

Public/private property damage	$ 0
Cost of emergency response phase	$ 75,000
Cost of environmental remediation	$ 936,734
Other Costs	$ 0
(describe)	

Operator Losses:

Value of product lost	$ 100
Value of operator property damage	$ 0
Other Costs	$ 1,011,744
(describe)	REPAIR AND ENVIRONMENTAL RESTORATION
Total Costs:	$ 2,023,578

6. Commodity Spilled ● Yes ○ No
(If Yes, complete Parts a through c where applicable)

a. Name of commodity spilled GASOLINE

b. Classification of commodity spilled:
- ○ HVLs/other flammable or toxic fluid which is a gas at ambient conditions
- ○ CO_2 or other non-flammable, non-toxic fluid which is a gas at ambient conditons
- ● Gasoline, diesel, fuel oil or other petroleum product which is a liquid at ambient conditions
- ○ Crude oil

c. Estimated amount of commodity involved :
- ● **Barrels**
- ○ **Gallons (check only if spill is less than one barrel)**

Amounts :
Spilled : 1
Recovered: 1

CAUSES FOR SMALL SPILLS ONLY *(5 gallons to under 5 barrels)* :

(For large spills [5 barrels or greater] see Part H)

○ **Corrosion** ○ **Natural Forces** ○ **Excavation Damage** ○ **Other Ouside Force Damage**
● **Materal and/or Weld Failures** ○ **Equipment** ○ **Incorrect Operation** ○ **Other**

PART B - PREPARER AND AUTHORIZED SIGNATURE

STEPHEN E. GILLIAM
(type or print) Preparer's Name and Title

(678) 762-2314
Area Code and Telephone Number

SGILLIAM@COLPIPE.COM
Preparer's E-mail Address

(678) 762-2464
Area Code and Facsimile Number

Authorized Signature | (type or print) Name and Title | Date | Area Cod and Telephone Number

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PART C - ORIGIN OF THE ACCIDENT *(Check all that apply)*

1. Additional location information
   a. Line segment name or ID **LINE 4**
   b. Accident on Federal land other than Outer Continental Shelf ○ Yes ● No
   c. Is pipeline interstate? ● Yes ○ No

Offshore: ○ Yes ● No (*comple d if offshore*)
d. Area _____ Block # _____
State /____/ or Outer Continental Shelf ☐

2. Location of system involved (check all that apply)
   - ☐ Operator's Property
   - ☒ Pipeline Right of Way
   - ☒ High Consequence Area (HCA)?
     Describe HCA **OPA & ECO USA**

3. Part of system involved in accident
   - ○ Above Ground Storage Tank
   - ○ Cavern or other below ground storage facility
   - ○ Pump/meter station; terminal/tank farm piping and equipment, including sumps
   - ○ Other Specify: _____
   - ● Onshore **pipeline**, including valve sites
   - ○ Offshore **pipeline**, including platforms

*if failure occurred on **pipeline**, complete items a - g:*

4. Failure occurred on
   - ● Body of Pipe
   - ○ Pump
   - ○ Component
   - ○ Repair Sleeve
   - ○ Girth Weld
   - ○ Pipe Seam
   - ○ Sump
   - ○ Valve
   - ○ Welded Fitting
   - ○ Scraper Trap
   - ○ Joint
   - ○ Metering Facility
   - ○ Bolted Fitting
   - ○ Other *(specify)* _____

Year the component that failed was installed: /**1963**/

5. Maximum operating pressure (MOP)
   a. Estimated pressure at point and time of accident: **230** *PSIG*
   b. MOP at time of accident: **480** *PSIG*
   c. Did an overpressurization occur relating to the accident? ○ Yes ● No

a. Type of leak or rupture
   - ○ Leak: ○ Pinhole ○ Connection Failure *(complete sec. H5)* ○ Puncture, diameter *(inches)* _____
   - ○ Rupture: ○ Circumferential - Separation ○ Longitudinal - Tear/Crack, length *(inches)* _____ Propagation Length, total, both sides *(feet)* _____
   - ○ N/A
   - ● Other **LEAK WITH LONGITUDINAL - TEAR/CRACK**

b. Type of block valve used for isolation of immediate section:
   - Upstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve
   - Downstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve

c. Length of segment isolated **10,834** ft
d. Distance between valves **10,834** ft
e. Is segment configured for internal inspection tools? ● Yes ○ No
f. Had there been an in-line inspection device run at the point of failure? ● Yes ○ No ○ Don't Know ○ Not Possible due to physical constraints in the system
g. If Yes, type of device run *(check all that apply)*

☒	High Resolution Magnetic Flux tool	Year run: **1998**
☐	Low Resolution Magnetic Flux tool	Year run:
☐	UT tool	Year run:
☐	Geometry tool	Year run:
☐	Caliper tool	Year run:
☐	Crack tool	Year run:
☐	Hard Spot tool	Year run:
☐	Other tool	Year run:

PART D - MATERIAL SPECIFICATION

1. Nominal pipe size *(NPS)* /**32**/ in.
2. Wall thickness **281**/ in.
3. Specification **5L** SMYS /**913**/
4. Seam type **SAW**
5. valve type _____
6. *Manufactured by* **NATIONAL TUBE** *in year* /**1963**/

PART E - ENVIRONMENT

1. *Area of accident*
   - ○ Under pavement
   - ● Underground
   - ○ Inside/under building
   - ○ In open ditch
   - ○ Above ground
   - ○ Under water
   - ○ Other _____

2. *Depth of cover:* **42** *inches*

PART F - CONSEQUENCES

1. Consequences *(check and complete all that apply)*

a.	Fatalities	Injuries
Number of operator employees:	0	0
Contractor employees working for operator:	0	0
General public:	0	0
Totals:	0	0

b. Was pipeline/segment shutdown due to leak? ● Yes ○ No
If Yes, how long? **3** days **3** hours **45** minutes

c. Product ignited ○ Yes ● No d. Explosion ○ Yes ● No
e. ☐ **Evacuation** *(general public only)* /_____/ people
Reason for Evacuation:
- ○ Precautionary by company
- ○ Evacuation required or initiated by public official

f. Elapsed time until area was made safe:
/____/ hr. /____/ min.

2. Environmental Impact
a. Wildlife Impact:
- Fish/aquatic ○ Yes ● No
- Bird ○ Yes ● No
- Terrestrial ● Yes ○ No

b. Soil Contamination ● Yes ○ No
If Yes, estimated number of cubic yards: **500**
c. Long term impact assessment performed: ● Yes ○ No
d. Anticipated remediation ● Yes ○ No
If Yes, Check all that apply: ☒ Surface water ☐ Groundwater ☒ Soil ☐ Vegetation ☐ Wildlife

e. Water Contamination: ● Yes ○ No *(If Yes, provide the following)*
Amount in water **0** barrels
- Ocean/Seawater ● No ○ Yes
- Surface ○ No ● Yes
- Groundwater ● No ○ Yes
- Drinking water ● No ○ Yes *(If Yes, check below.)* ○ Private well ○ Public water intake

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PART G - LEAK DETECTION INFORMATION

1. Computer based leak detection capability in place? ○ Yes ● No
2. Was the release intially detected by? (check one):
   - ○ CPM/SCADA-based system with leak detection
   - ○ Static shut-in test or other pressure or leak test
   - ○ Local operating personnel, procedures or equipment
   - ○ Remote operating personnel, including controllers
   - ○ Air patrol or ground surveillance
   - ● A third party ○ Other (specify) _____
3. Estimated leak duration days 3 hours _____

PART H - APPARENT CAUSE

Important: There are 25 numbered causes in this Part H. Check the box corresponding to the primary cause of the accident. Check one circle in each of the supplemental categories corresponding to the cause you indicate. Secc the instructions for guidance.

H1 - CORROSION

1. ○ External Corrosion
2. ○ Internal Corrosion

(Complete items a - e where applicable.)

a. Pipe Coating
- ○ Bare
- ○ Coated

b. Visual Examination
- ○ Localized Pitting
- ○ General Corrosion
- ○ Other _____

c. Cause of Corrosion
- ○ Galvanic
- ○ Atmospheric
- ○ Stray Current
- ○ Microbiological
- ○ Cathodic Protection Disrupted
- ○ Stress Corrosion Cracking
- ○ Selective Seam Corrosion
- ○ Other _____

d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?
○ No ○ Yes, Year Protection Started: /_____/

e. Was pipe previously damaged in the area of corrosion?
○ No ○ Yes => Estimated time prior to accident: /____/ years /____/ months Unknown ☐

H2 - NATURAL FORCES

3. ○ Earth Movement => ○ Earthquake ○ Subsidence ○ Landslide ○ Other _____
4. ○ Lightning
5. ○ Heavy Rains/Floods => ○ Washouts ○ Flotation ○ Mudslide ○ Scouring ○ Other _____
6. ○ Temperature => ○ Thermal stress ○ Frost heave ○ Frozen components ○ Other _____
7. ○ High Winds

H3 - EXCAVATION DAMAGE

8. ○ Operator Excavation Damage (including their contractors/Not Third Party)
9. ○ Third Party *(complete a-f)*
   - a. Excavator group
     ○ General Public ○ Government ○ Excavator other than Operator/subcontractor
   - b. Type: ○ Road Work ○ Pipeline ○ Water ○ Electric ○ Sewer ○ Phone/Cable
     ○ Landowner-not farming related ○ Farming ○ Raildroad
     ○ Other liquid or gas transmission pipeline-operator or their contractor
     ○ Nautical Operations ○ Other _____
   - c. Excavation was: ○ Open Trench ○ Sub-strata (boring, directional drilling, etc...)
   - d. Excavation was an ongoing activity (Month or longer) ○ Yes ○ No If Yes, Date of last contact /____/
   - e. Did operator get prior notification of excavation activity?
     ○ Yes; Date received: /____/ mo. /_____/ day /____/ yr. ○ No
     Notification received from: ○ One Call System ○ Excavator ○ Contractor ○ Landowner
   - f. Was pipeline marked as result of location request for excavation? ○ No ○ Yes (If Yes, check applicable items i - iv)
     - i. Temporary markings: ○ Flags ○ Stakes ○ Paint
     - ii. Permanent markings: ○ Yes ○ No
     - iii. Marks were (check one) : ○ Accurate ○ Not Accurate
     - iv. Were marks made within required time? ○ Yes ○ No

H4 - OTHER OUTSIDE FORCE DAMAGE

10. ○ Fire/Explosion as primary cause of failure => Fire/Explosion cause: ○ Man Made ○ Natural
11. ○ Car, truck or other vehicle not relating to excavation activity damaging pipe
12. ○ Rupture of Previously Damaged Pipe
13. ○ Vandalism

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H5 - MATERIAL AND/OR WELD FAILURES

Material

14. ● Body of Pipe => ○ Dent ○ Gouge ○ Bend ○ Arc Burn ● Other DENT W/CRACK

15. ○ Component => ○ Valve ○ Fitting ○ Vessel ○ Extruded Outlet ○ Other _____

16. ○ Joint => ○ Gasket ○ O-Ring ○ Threads ○ Other _____

Weld

17. ○ Butt => ○ Pipe ○ Fabrication ○ Other _____

18. ○ Fillet => ○ Branch ○ Hot Tap ○ Fitting ○ Repair Sleeve ○ Other _____

19. ○ Pipe Seam => ○ LF ERW ○ DSAW ○ Seamless ○ Flash Weld
○ HF ERW ○ SAW ○ Spiral ○ Other _____

Complete a-g if you indicate **any** *cause in part H5.*

a. Type of failure:
○ Construction Defect => ○ Poor Workmanship ○ Procedure not followed ○ Poor Construction Procedures
● Material Defect

b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site? ○ Yes ● No

c. Was part which leaked pressure tested before accident occurred? ● Yes, complete d-g ○ No

d. Date of test: / 1993 / yr. / / mo. / / day

e. Test medium: ● Water ○ Inert Gas ○ Other _____

f. Time held at test pressure: / 8 / hr.

g. Estimated test pressure at point of accident: 859 *PSIG*

H6 - EQUIPMENT

20. ○ Malfunction of Control/Relief Equipment => ○ Control valve ○ Instrumentation ○ SCADA ○ Communications
○ Block valve ○ Relief valve ○ Power failure
○ Other _____

21. ○ Threads Stripped Broken Pipe Coupling => ○ Nipples ○ Valve Threads ○ Dresser Couplings
○ Other _____

22. ○ Seal Failure => ○ Gasket ○ O-Ring ○ Seal/Pump Packing
○ Other _____

H7 - INCORRECT OPERATION

23. ○ Incorrect Operation

a. Type ○ Inadequate Procedures ○ Inadequate Safety Practices ○ Failure to Follow Procedures
○ Other _____

b. Number of employees involved who failed a post-accident test: drug test: / / alcohol test / /

H8 - OTHER

24. ○ Miscellaneous, *describe:* _____

25. ○ Unknown
○ Investigation Complete ○ Still Under Investigation (*Submit a supplemental report when investigation is complete*)

PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

(Attach additional sheets as necessary)

Refer to ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

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ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

ON MARCH 16, 2003, A MOTORIST NOTICED STAINING AND DEAD VEGETATION ON OUR RIGHT OF WAY JUST DOWNSTREAM OF WHERE WE CROSS RT. 28 IN NOKESVILLE, VA. HE CALLED COLONIAL'S FAIRFAX DELIVERY FACILITY AT 16:15 TO REPORT HIS FINDING. THE FAIRFAX OPERATOR INITIATED THE APPROPRIATE RESPONSE PROCEDURES.

THE INVESTIGATION OF THE PIPELINE FAILURE IS ONGOING TO DETERMINE THE CASUE OF THE FAILURE. A CRACK HAD DEVELOPED IN A BOTTOM SIDE DENT. A PIPELINE REPAIR SLEEVE WAS INSTALLED. ADEQUATE SEDIMENT AND STORMWATER RUNOFF CONTROLS WERE PUT IN PLACE, RAIN WATER REMOVED DURING EXCAVATION WAS TREATED ON-SITE THROUGH CARBON VESSELS.

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NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $25,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $500,000 as provided in 49 USC 60122

Form Approved
OMB No. 2137-0047

U.S. Department of Transportaion
Research and Special Programs
Administration

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date APR 15,2003

No. 20030147 -- 3962
(DOT Use Only)

INSTRUCTIONS

Important: ***Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions you can obtain one from the Office Of Pipeline Safety Web Page at http://ops.dot.gov***

PART A - GENERAL REPORT INFORMATION

check: ☐ Original Report ☒ Supplemental Report ☐ Final Report

1. a. Operator's OPS 5-digit Identification Number (if know) / 2552 /
2. b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if know) / /
   c. Name of Operator COLONIAL PIPELINE CO
   d. Operator street address 1185 SANCTUARY PARKWAY, SUITE 100
   e. Operator address ALPHARETTA FULTON GA 30004-4738
   City, County, State and ZIP Code

IMPORTANT: IF THE SPILL IS SMALL, THAT IS, THE AMOUNT IS AT LEAST 5 GALLONS BUT IS LESS THAN 5 BARRELS, COMPLETE THIS PAGE ONLY, UNLESS THE SPILL IS TO WATER AS DESCRIBED IN 49 CFR §195.52(A)(4) OR IS OTHERWISE REPORTABLE UNDER §195.50 AS REVISED IN CY 2001.

2. Time and date of the accident

hr.	month	day	year
1830	03	16	2003

3. Location of accident
(If offshore, do not complete a through d See Part C.1)

a. Latitude: 38.4124 Longitude: -77.330
(If not available, see instructions for how to provide specific location)

b. NOKESVILLE PRINCE WILLIAM
City and County or Parish

c. VA 20181
State and Zip Code

d. Mile post/valve station ○ or Survey Station no. ●
(whichever gives more accurate location)
9882+87

4. Telephone report

NRC Report Number	month	day	year
639632	03	16	2003

5. Losses (Estimated)

Public/Community Losses reimbursed by operator:

Public/private property damage	$ 0
Cost of emergency response phase	$ 75,000
Cost of environmental remediation	$ 1,545,000
Other Costs	$ 0
(describe)	

Operator Losses:

Value of product lost	$ 100
Value of operator property damage	$ 0
Other Costs	$ 1,620,000
(describe)	REPAIR AND ENVIRONMENTAL RESTORATION
Total Costs:	$ 3,240,100

6. Commodity Spilled ● Yes ○ No
(If Yes, complete Parts a through c where applicable)

a. Name of commodity spilled GASOLINE

b. Classification of commodity spilled:
- ○ HVLs/other flammable or toxic fluid which is a gas at ambient conditions
- ○ CO_2 or other non-flammable, non-toxic fluid which is a gas at ambient conditons
- ● Gasoline, diesel, fuel oil or other petroleum product which is a liquid at ambient conditions
- ○ Crude oil

c. Estimated amount of commodity involved :
- ● **Barrels**
- ○ **Gallons (check only if spill is less than one barrel)**

Amounts :
Spilled : 16
Recovered: 16

CAUSES FOR SMALL SPILLS ONLY *(5 gallons to under 5 barrels)* :

(For large spills [5 barrels or greater] see Part H)

○ **Corrosion** ○ **Natural Forces** ○ **Excavation Damage** ○ **Other Ouside Force Damage**
○ **Materal and/or Weld Failures** ○ **Equipment** ○ **Incorrect Operation** ○ **Other**

PART B - PREPARER AND AUTHORIZED SIGNATURE

A. MAC TAYLOR
(type or print) Preparer's Name and Title

(678) 762-2872
Area Code and Telephone Number

ATAYLOR@COLPIPE.COM
Preparer's E-mail Address

(678) 762-2464
Area Code and Facsimile Number

Authorized Signature | (type or print) Name and Title | Date | Area Cod and Telephone Number

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PART C - ORIGIN OF THE ACCIDENT *(Check all that apply)*

1. Additional location information
   a. Line segment name or ID **LINE 4**
   b. Accident on Federal land other than Outer Continental Shelf ○ Yes ● No
   c. Is pipeline interstate? ● Yes ○ No

Offshore: ○ Yes ● No (*comple d if offshore*)
d. Area _____ Block # _____
State **/ /** or Outer Continental Shelf ☐

2. Location of system involved (check all that apply)
   - ☐ Operator's Property
   - ☒ Pipeline Right of Way
   - ☒ High Consequence Area (HCA)?
     Describe HCA **OPA & ECO USA**

3. Part of system involved in accident
   - ○ Above Ground Storage Tank
   - ○ Cavern or other below ground storage facility
   - ○ Pump/meter station; terminal/tank farm piping and equipment, including sumps
   - ○ Other Specify: _____
   - ● Onshore **pipeline**, including valve sites
   - ○ Offshore **pipeline**, including platforms

*if failure occurred on **pipeline**, complete items a - g:*

4. Failure occurred on
   - ● Body of Pipe
   - ○ Pump
   - ○ Component
   - ○ Repair Sleeve
   - ○ Girth Weld
   - ○ Pipe Seam
   - ○ Sump
   - ○ Valve
   - ○ Welded Fitting
   - ○ Scraper Trap
   - ○ Joint
   - ○ Metering Facility
   - ○ Bolted Fitting
   - ○ Other *(specify)* _____

Year the component that failed was installed: **/ 1963 /**

5. Maximum operating pressure (MOP)
   a. Estimated pressure at point and time of accident: **230** *PSIG*
   b. MOP at time of accident: **480** *PSIG*
   c. Did an overpressurization occur relating to the accident? ○ Yes ● No

a. Type of leak or rupture
   - ○ Leak: ○ Pinhole ○ Connection Failure *(complete sec. H5)* ○ Puncture, diameter *(inches)* _____
   - ○ Rupture: ○ Circumferential - Separation ○ Longitudinal - Tear/Crack, length *(inches)* _____ Propagation Length, total, both sides *(feet)* _____
   - ○ N/A
   - ● Other **CRACK IN BOTTOM SIDE DENT**

b. Type of block valve used for isolation of immediate section:
   - Upstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve
   - Downstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve

c. Length of segment isolated **108,343** ft
d. Distance between valves **108,343** ft
e. Is segment configured for internal inspection tools? ● Yes ○ No
f. Had there been an in-line inspection device run at the point of failure? ● Yes ○ No ○ Don't Know ○ Not Possible due to physical constraints in the system
g. If Yes, type of device run *(check all that apply)*

☒	High Resolution Magnetic Flux tool	Year run: **1998**
☐	Low Resolution Magnetic Flux tool	Year run:
☐	UT tool	Year run:
☐	Geometry tool	Year run:
☐	Caliper tool	Year run:
☐	Crack tool	Year run:
☐	Hard Spot tool	Year run:
☐	Other tool	Year run:

PART D - MATERIAL SPECIFICATION

1. Nominal pipe size *(NPS)* **/ 32 /** in.
2. Wall thickness **281 /** in.
3. Specification **5L** SMYS **/ 913 /**
4. Seam type **SAW**
5. valve type _____
6. *Manufactured by* **NATIONAL TUBE** *in year* **/ 1963 /**

PART E - ENVIRONMENT

1. *Area of accident*
   - ○ Under pavement
   - ● Underground
   - ○ Inside/under building
   - ○ In open ditch
   - ○ Above ground
   - ○ Under water
   - ○ Other _____

2. *Depth of cover:* **42** *inches*

PART F - CONSEQUENCES

1. Consequences *(check and complete all that apply)*

a.	Fatalities	Injuries
Number of operator employees:	0	0
Contractor employees working for operator:	0	0
General public:	0	0
Totals:	0	0

b. Was pipeline/segment shutdown due to leak? ● Yes ○ No
If Yes, how long? **3** days **3** hours **45** minutes

c. Product ignited ○ Yes ● No d. Explosion ○ Yes ● No
e. ☐ **Evacuation** *(general public only)* **/ /** people
Reason for Evacuation:
- ○ Precautionary by company
- ○ Evacuation required or initiated by public official

f. Elapsed time until area was made safe: **/ /** hr. **/ /** min.

2. Environmental Impact
a. Wildlife Impact:
- Fish/aquatic ○ Yes ● No
- Bird ○ Yes ● No
- Terrestrial ● Yes ○ No

b. Soil Contamination ● Yes ○ No
If Yes, estimated number of cubic yards: **500**
c. Long term impact assessment performed: ● Yes ○ No
d. Anticipated remediation ● Yes ○ No

e. Water Contamination: ● Yes ○ No *(If Yes, provide the following)*
Amount in water **8** barrels
- Ocean/Seawater ○ No ● Yes
- Surface ○ No ● Yes
- Groundwater ● No ○ Yes
- Drinking water ● No ○ Yes *(If Yes, check below.)* ○ Private well ● Public water intake

If Yes, Check all that apply: ☐ Surface water ☐ Groundwater ☒ Soil ☐ Vegetation ☐ Wildlife

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PART G - LEAK DETECTION INFORMATION

1. Computer based leak detection capability in place? ○ Yes ● No
2. Was the release intially detected by? (check one):
   - ○ CPM/SCADA-based system with leak detection
   - ○ Static shut-in test or other pressure or leak test
   - ○ Local operating personnel, procedures or equipment
   - ○ Remote operating personnel, including controllers
   - ○ Air patrol or ground surveillance
   - ● A third party ○ Other (specify) _____
3. Estimated leak duration days 3 hours _____

PART H - APPARENT CAUSE

Important: There are 25 numbered causes in this Part H. Check the box corresponding to the primary cause of the accident. Check one circle in each of the supplemental categories corresponding to the cause you indicate. Secc the instructions for guidance.

H1 - CORROSION

1. ○ External Corrosion
2. ○ Internal Corrosion

(Complete items a - e where applicable.)

a. Pipe Coating
- ○ Bare
- ○ Coated

b. Visual Examination
- ○ Localized Pitting
- ○ General Corrosion
- ○ Other _____

c. Cause of Corrosion
- ○ Galvanic
- ○ Atmospheric
- ○ Stray Current
- ○ Microbiological
- ○ Cathodic Protection Disrupted
- ○ Stress Corrosion Cracking
- ○ Selective Seam Corrosion
- ○ Other _____

d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?
○ No ○ Yes, Year Protection Started: /_____/

e. Was pipe previously damaged in the area of corrosion?
○ No ○ Yes => Estimated time prior to accident: /____/ years /____/ months Unknown ☐

H2 - NATURAL FORCES

3. ○ Earth Movement => ○ Earthquake ○ Subsidence ○ Landslide ○ Other _____
4. ○ Lightning
5. ○ Heavy Rains/Floods => ○ Washouts ○ Flotation ○ Mudslide ○ Scouring ○ Other _____
6. ○ Temperature => ○ Thermal stress ○ Frost heave ○ Frozen components ○ Other _____
7. ○ High Winds

H3 - EXCAVATION DAMAGE

8. ○ Operator Excavation Damage (including their contractors/Not Third Party)
9. ○ Third Party *(complete a-f)*
   - a. Excavator group
     ○ General Public ○ Government ○ Excavator other than Operator/subcontractor
   - b. Type: ○ Road Work ○ Pipeline ○ Water ○ Electric ○ Sewer ○ Phone/Cable
     ○ Landowner-not farming related ○ Farming ○ Raildroad
     ○ Other liquid or gas transmission pipeline-operator or their contractor
     ○ Nautical Operations ○ Other _____
   - c. Excavation was: ○ Open Trench ○ Sub-strata (boring, directional drilling, etc...)
   - d. Excavation was an ongoing activity (Month or longer) ○ Yes ○ No If Yes, Date of last contact /____/
   - e. Did operator get prior notification of excavation activity?
     ○ Yes; Date received: /____/ mo. /_____/ day /____/ yr. ○ No
     Notification received from: ○ One Call System ○ Excavator ○ Contractor ○ Landowner
   - f. Was pipeline marked as result of location request for excavation? ○ No ○ Yes (If Yes, check applicable items i - iv)
     - i. Temporary markings: ○ Flags ○ Stakes ○ Paint
     - ii. Permanent markings: ○ Yes ○ No
     - iii. Marks were (check one) : ○ Accurate ○ Not Accurate
     - iv. Were marks made within required time? ○ Yes ○ No

H4 - OTHER OUTSIDE FORCE DAMAGE

10. ○ Fire/Explosion as primary cause of failure => Fire/Explosion cause: ○ Man Made ○ Natural
11. ○ Car, truck or other vehicle not relating to excavation activity damaging pipe
12. ○ Rupture of Previously Damaged Pipe
13. ○ Vandalism

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H5 - MATERIAL AND/OR WELD FAILURES

Material

14. ● Body of Pipe => ○ Dent ○ Gouge ○ Bend ○ Arc Burn ● Other DENT WITH CRACK

15. ○ Component => ○ Valve ○ Fitting ○ Vessel ○ Extruded Outlet ○ Other _____

16. ○ Joint => ○ Gasket ○ O-Ring ○ Threads ○ Other _____

Weld

17. ○ Butt => ○ Pipe ○ Fabrication ○ Other _____

18. ○ Fillet => ○ Branch ○ Hot Tap ○ Fitting ○ Repair Sleeve ○ Other _____

19. ○ Pipe Seam => ○ LF ERW ○ DSAW ○ Seamless ○ Flash Weld
○ HF ERW ○ SAW ○ Spiral ○ Other _____

Complete a-g if you indicate **any** *cause in part H5.*

a. Type of failure:
○ Construction Defect => ○ Poor Workmanship ○ Procedure not followed ○ Poor Construction Procedures
● Material Defect

b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site? ○ Yes ● No

c. Was part which leaked pressure tested before accident occurred? ● Yes, complete d-g ○ No

d. Date of test: / 1993 / yr. / / mo. / / day

e. Test medium: ● Water ○ Inert Gas ○ Other _____

f. Time held at test pressure: / 8 / hr.

g. Estimated test pressure at point of accident: 859 *PSIG*

H6 - EQUIPMENT

20. ○ Malfunction of Control/Relief Equipment => ○ Control valve ○ Instrumentation ○ SCADA ○ Communications
○ Block valve ○ Relief valve ○ Power failure
○ Other _____

21. ○ Threads Stripped Broken Pipe Coupling => ○ Nipples ○ Valve Threads ○ Dresser Couplings
○ Other _____

22. ○ Seal Failure => ○ Gasket ○ O-Ring ○ Seal/Pump Packing
○ Other _____

H7 - INCORRECT OPERATION

23. ○ Incorrect Operation

a. Type ○ Inadequate Procedures ○ Inadequate Safety Practices ○ Failure to Follow Procedures
○ Other _____

b. Number of employees involved who failed a post-accident test: drug test: / / alcohol test / /

H8 - OTHER

24. ○ Miscellaneous, *describe:* _____

25. ○ Unknown
○ Investigation Complete ○ Still Under Investigation (*Submit a supplemental report when investigation is complete*)

PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

(Attach additional sheets as necessary)

Refer to ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

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ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

ON MARCH 16, 2003, A MOTORIST NOTICED STAINING AND DEAD VEGETATION ON COLONIAL'S RIGHT OF WAY JUST DOWNSTREAM OF WHERE LINE 3 AND 4 CROSS RT. 28 IN NOKESVILLE, VA. HE CALLED COLONIAL'S FAIRFAX DELIVERY FACILITY AT 16:15 TO REPORT HIS FINDING. THE FAIRFAX OPERATOR INITIATED THE APPROPRIATE RESPONSE PROCEDURES.

THE LEAK WAS FOUND ON THE 32 IN. LINE 4 ON MARCH 19, 2003. A CRACK HAD DEVELOPED IN A BOTTOM SIDE DENT. A PIPELINE REPAIR SLEEVE WAS INSTALLED. ADEQUATE SEDIMENT AND STORMWATER RUNOFF CONTROLS WERE PUT IN PLACE. RAIN WATER REMOVED DURING EXCAVATION WAS TREATED ON-SITE THROUGH CARBON VESSELS.

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U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS** **Report format corresponds to Form PHMSA F 7000-1 (01-2001)**	**Original Report Date**	**April 15, 2003**
		No.	**20030147 - 4843**

PART A – GENERAL INFORMATION					
N	**Original Report**	**Y**	**Supplemental Report**	**Y**	**Final Report**
Last Revision Date			11/10/2006		
1. Operator Name and Address					
a. Operator's 5-digit Identification Number			2552		
b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if known)					
c. Name of Operator			COLONIAL PIPELINE CO		
d. Operator street address			1185 SANCTUARY PARKWAY, SUITE 100		
e. Operator address		City	ALPHARETTA		
		County or Parish	FULTON		
		State	GA		
		Zip code	30004-4738		
2. Time and date of the accident					
		Hour	18:30		
		Date of the accident	03/16/2003		
3. Location of accident					
a. Latitude			38.4124		
Longitude			-77.330		
b. City			NOKESVILLE		
County or Parish			PRINCE WILLIAM		
c. State			VA		
Zip Code			20181		
d. Mile Post/Valve Station					
Survey Station No			9882+87		
4. Telephone Report					
NRC Report Number			639632		
Date			03/16/2003		
5. Losses (Estimated)					
Public/Community Losses reimbursed by operator					
Public/private property damage		$	0		
Cost of emergency response phase		$	75,000		
Cost of environmental remediation		$	1,453,000		
Other Costs		$	0		
Describe					
Operator Losses					
Value of product lost		$	100		
Value of operator property damage		$	100,000		
Other Costs		$	0		
Describe					
Total Costs		$	1,628,100		
6. Commodity Spilled					
Commodity spilled (yes/no)			Y		
a. Name of commodity spilled			GASOLINE		
b. Classification of commodity spilled			GASOLINE, DIESEL, FUEL OIL OR OTHER PETROLEUM PRODUCT WHICH IS A LIQUID AT AMBIENT CONDITIONS		
c. Estimated amount of commodity involved					
Unit of Measure			BARRELS		
Amount Spilled			16.00		
Amount Recovered			16.00		
CAUSES FOR SMALL SPILLS			NO DATA		
PART B – PREPARER AND AUTHORIZED SIGNATURE					

Preparer's Name		A. MAC TAYLOR	
Area Code and Telephone Number		6787622872	
Preparer's E-mail Address		ATAYLOR@COLPIPE.COM	
Area Code and Facsimile Number		6787622464	
PART C – ORIGIN OF THE ACCIDENT			
1. Additional location information			
a. Line segment name or ID		LINE 4	
b. Accident on Federal Land other than Outer Continental Shelf		NO	
c. Is pipeline Interstate		Y	
Offshore		N	
d. Area			
Block #			
State			
Outer Continental Shelf			
2. Location of system involved			
Operator's Property		NO	
Pipeline Right of Way		Y	
High Consequence Area (HCA)		Y	
Describe HCA		OPA & ECO USA	
3. Part of system involved in accident		ONSHORE PIPELINE, INCLUDING VALVE SITES	
Other (specify)			
If failure occurred on Pipeline, complete items a-g			
a. Leak or Rupture		OTHER	
Type of Leak			
- Puncture, diameter *(inches)*			
Type of Rupture			
- Tear/Crack, length *(inches)*			
- Propagation Length, total, both sides *(feet)*			
Other (specify)			
b. Type of block valve used for isolation immediate section			
Upstream			
Manual		NO	
Automatic		NO	
Remote Control		YES	
Check Valve		NO	
Downstream			
Manual		NO	
Automatic		NO	
Remote Control		YES	
Check Valve		NO	
c. Length of segment isolated (ft)		108343	
d. Distance between valves (ft)		108343	
e. Is segment configured for internal inspection tools?		YES	
f. Had there been an in-line inspection device run at the point of failure?		YES	
g. If Yes, type of device run			
High Resolution Magnetic Flux tool	YES	Year run	1998
Low Resolution Magnetic Flux tool	NO	Year run	
UT tool	NO	Year run	
Geometry tool	NO	Year run	
Caliper tool	NO	Year run	
Crack tool	NO	Year run	
Hard Spot tool	NO	Year run	
Other tool	NO	Year run	
4. Failure occurred on		BODY OF PIPE	
Other (specify)			
Year the component that failed was installed		1963	
5. Maximum operating pressure (MOP)			

a. Estimated pressure at point and time of accident (PSIG)	230	
b. MOP at time of accident (PSIG)	480.00	
c. Did an over pressurization occur relating to the accident?	N	
PART D – MATERIAL SPECIFICATION		
1. Nominal pipe size (NPS) (inches)	32	
2. Wall thickness (inches)	281	
3. Specification	5L	
SMYS	52000	
4. Seam type	SAW	
5. Valve type		
6. Manufactured by	NATIONAL TUBE	
in year	1963	
PART E - ENVIRONMENT		
1. Area of accident	UNDER GROUND	
Other (specify)		
2. Depth of cover (inches)	42	
PART F - CONSEQUENCES		
1. Consequences	**Fatalities**	**Injuries**
a. Number of operator employees	0	0
Contractor employees working for operator	0	0
General public	0	0
Totals	0	0
b. Was pipeline/segment shutdown due to leak?	Y	
If Yes, how long? Days	3	
Hours	3	
Minutes	45	
c. Product ignited	Gas did not Ignite	
d. Explosion	NO EXPLOSION	
e. Evacuation *(general public only)*	N	
Number of people		
Reason for Evacuation		
f. Elapsed time until area was made safe		
Hours		
Minutes		
2. Environmental Impact		
a. Wildlife Impact		
Fish/aquatic	N	
Birds	N	
Terrestrial	Y	
b. Soil Contamination	Y	
If Yes, estimated number of cubic yards	500	
c. Long term impact assessment performed	Y	
d. Anticipated remediation	Y	
If Yes, check all that apply		
Surface Water	N	
Groundwater	N	
Soil	Y	
Vegetation	N	
Wildlife	N	
e. Water Contamination	Y	
Amount in water (barrels)	8	
Ocean/Seawater	Y	
Surface	Y	
Groundwater	N	
Drinking water	N	
Drinking water source	PUBLIC WATER INTAKE	
PART G – LEAK DETECTION INFORMATION		
1. Computer based leak detection capability in place?	N	
2. Was the release initially detected by?	A THIRD PARTY	
Other (specify)		

3. Estimated leak duration Days	3
Hours	
PART H – APPARENT CAUSE	
H1 – CORROSION	
1. External Corrosion	
2. Internal Corrosion	
Complete items a-e where applicable	
a. Pipe Coating	
b. Visual Examination	
Other (specify)	
c. Cause of Corrosion	
Other (specify)	
d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?	
Year Protection Started	
e. Was pipe previously damaged in the area of corrosion?	
Estimated time prior to accident Years	
Months	
H2 – NATURAL FORCES	
3. Earth Movement	
Description	
Other (specify)	
4. Lightning	
5. Heavy Rains/Floods	
Description	
Other (specify)	
6. Temperature	
Description	
Other (specify)	
7. High Winds	
H3 – EXCAVATION DAMAGE	
8. Operator Excavation Damage (including their contractors / Not Third Party)	
9. Third Party	
a. Excavator group	
b. Type	
Other (specify)	
c. Excavation was	
d. Excavation was ongoing activity (Month or longer)	
If Yes, Date of last contact	
e. Did operator get prior notification of excavation activity?	
If Yes; Date received	null
Notification received from	
f. Was pipeline marked?	
i. Temporary markings	
ii. Permanent markings	
iii. Marks were	
iv. Were marks made within required time?	
H4 – OTHER OUTSIDE FORCE DAMAGE	
10. Fire/Explosion as primary cause of failure	
Fire/Explosion cause	
11. Car, truck or other vehicle not relating to excavation activity damaging pipe	
12. Rupture of Previously Damaged Pipe	
13. Vandalism	
H5 – MATERIAL AND/OR WELD FAILURES	
Material	
14. Body of Pipe	Yes
Description	OTHER

Other (specify)	DENT WITH CRACK
15. Component	
Description	
Other (specify)	
16. Joint	
Description	
Other (specify)	
Weld	
17. Butt	
Description	
Other (specify)	
18. Fillet	
Description	
Other (specify)	
19. Pipe Seam	
Description	
Other (specify)	
Complete a-g if you indicate any cause in part H5	
a. Type of failure	
Construction Defect	N
Description	
Material Defect	Y
b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site?	N
c. Was part which leaked pressure tested before accident occurred?	Y
d. Date of test	
Year	1993
Month	
Day	
e. Test medium	WATER
Other (specify)	
f. Time held at test pressure (hr)	8
g. Estimated test pressure at point of incident (PSIG)	859
H6 – EQUIPMENT	
20. Malfunction of Control/Relief Equipment	
Description	
Other (specify)	
21. Threads Stripped, Broken Pipe Coupling	
Description	
Other (specify)	
22. Seal Failure	
Description	
Other (specify)	
H7 – INCORRECT OPERATION	
23. Incorrect Operation	
a. Type	
Other (specify)	
b. Number of employees involved who failed a post-accident test	
Drug test	
Alcohol test	
H8 - OTHER	
24. Miscellaneous	
Describe	
25. Unknown	
Describe	
PART I – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT	
ON MARCH 16, 2003, A MOTORIST NOTICED STAINING AND DEAD VEGETATION ON COLONIAL'S RIGHT OF WAY JUST DOWNSTREAM OF WHERE LINE 3 AND 4 CROSS RT. 28 IN NOKESVILLE, VA. HE CALLED COLONIAL'S FAIRFAX DELIVERY FACILITY AT 16:15 TO REPORT HIS FINDING. THE FAIRFAX OPERATOR INITIATED THE APPROPRIATE RESPONSE PROCEDURES. THE LEAK WAS	

FOUND ON THE 32 IN. LINE 4 ON MARCH 19, 2003. A CRACK HAD DEVELOPED IN A BOTTOM SIDE DENT. A PIPELINE REPAIR SLEEVE WAS INSTALLED. ADEQUATE SEDIMENT AND STORMWATER RUNOFF CONTROLS WERE PUT IN PLACE. RAIN WATER REMOVED DURING EXCAVATION WAS TREATED ON-SITE THROUGH CARBON VESSELS.

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $25,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $500,000 as provided in 49 USC 60122

Form Approved
OMB No. 2137-0047

U.S. Department of Transportaion
Research and Special Programs
Administration

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date JUN 25,2007

No. 20070173 -- 5802
(DOT Use Only)

INSTRUCTIONS

Important: ***Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions you can obtain one from the Office Of Pipeline Safety Web Page at http://ops.dot.gov***

PART A - GENERAL REPORT INFORMATION

check: ☒ **Original Report** ☐ **Supplemental Report** ☐ **Final Report**

1. a. Operator's OPS 5-digit Identification Number (if know) / 2552 /
2. b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if know) / /

c. Name of Operator COLONIAL PIPELINE COMPANY

d. Operator street address 1185 SANCTUARY PARKWAY, SUITE 100

e. Operator address ALPHARETTA FULTON GA 30004
City, County, State and ZIP Code

IMPORTANT: IF THE SPILL IS SMALL, THAT IS, THE AMOUNT IS AT LEAST 5 GALLONS BUT IS LESS THAN 5 BARRELS, COMPLETE THIS PAGE ONLY, UNLESS THE SPILL IS TO WATER AS DESCRIBED IN 49 CFR §195.52(A)(4) OR IS OTHERWISE REPORTABLE UNDER §195.50 AS REVISED IN CY 2001.

2. Time and date of the accident

hr.	month	day	year
730	05	29	2007

3. Location of accident
(If offshore, do not complete a through d See Part C.1)

a. Latitude: 33.5756 Longitude: -83.4724
(If not available, see instructions for how to provide specific location)

b. WINDER BARROW
City and County or Parish

c. GA
State and Zip Code

d. Mile post/valve station ○ or Survey Station no. ●
(whichever gives more accurate location)
2785+80

4. Telephone report

NRC Report Number	month	day	year
836773	05	29	2007

5. Losses (Estimated)

Public/Community Losses reimbursed by operator:

Public/private property damage	$ 200,000
Cost of emergency response phase	$ 1,300,000
Cost of environmental remediation	$ 180,000
Other Costs	$ 0
(describe)	

Operator Losses:

Value of product lost	$ 600
Value of operator property damage	$ 0
Other Costs	$ 0
(describe)	
Total Costs:	$ 1,680,600

6. Commodity Spilled ● Yes ○ No
(If Yes, complete Parts a through c where applicable)

a. Name of commodity spilled GASOLINE

b. Classification of commodity spilled:
- ○ HVLs/other flammable or toxic fluid which is a gas at ambient conditions
- ○ CO_2 or other non-flammable, non-toxic fluid which is a gas at ambient conditons
- ● Gasoline, diesel, fuel oil or other petroleum product which is a liquid at ambient conditions
- ○ Crude oil

c. Estimated amount of commodity involved :
- ● **Barrels**
- ○ **Gallons (check only if spill is less than one barrel)**

Amounts :
Spilled : 5
Recovered: 4

CAUSES FOR SMALL SPILLS ONLY *(5 gallons to under 5 barrels)* :

(For large spills [5 barrels or greater] see Part H)

○ **Corrosion** ○ **Natural Forces** ○ **Excavation Damage** ○ **Other Ouside Force Damage**
○ **Materal and/or Weld Failures** ○ **Equipment** ○ **Incorrect Operation** ● **Other**

PART B - PREPARER AND AUTHORIZED SIGNATURE

A. MAC TAYLOR
(type or print) Preparer's Name and Title

(678) 762-2872
Area Code and Telephone Number

ATAYLOR@COLPIPE.COM
Preparer's E-mail Address

(678) 762-2464
Area Code and Facsimile Number

Authorized Signature | (type or print) Name and Title | Date | Area Cod and Telephone Number

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PART C - ORIGIN OF THE ACCIDENT *(Check all that apply)*

1. Additional location information
   a. Line segment name or ID **LINE 1**
   b. Accident on Federal land other than Outer Continental Shelf ○ Yes ● No
   c. Is pipeline interstate? ● Yes ○ No

Offshore: ○ Yes ● No (*comple d if offshore*)
d. Area _____ Block # _____
State /____/ or Outer Continental Shelf ☐

2. Location of system involved (check all that apply)
   ☐ Operator's Property
   ☒ Pipeline Right of Way
   ☐ High Consequence Area (HCA)?
   Describe HCA _____

3. Part of system involved in accident
   ○ Above Ground Storage Tank
   ○ Cavern or other below ground storage facility
   ○ Pump/meter station; terminal/tank farm piping and equipment, including sumps
   ○ Other Specify: _____

   ● Onshore **pipeline**, including valve sites
   ○ Offshore **pipeline**, including platforms

   *if failure occurred on **pipeline**, complete items a - g:*

4. Failure occurred on
   ● Body of Pipe ○ Pipe Seam ○ Scraper Trap
   ○ Pump ○ Sump ○ Joint
   ○ Component ○ Valve ○ Metering Facility
   ○ Repair Sleeve ○ Welded Fitting ○ Bolted Fitting
   ○ Girth Weld
   ○ Other *(specify)* _____

   Year the component that failed was installed: /**1978**/

5. Maximum operating pressure (MOP)
   a. Estimated pressure at point and time of accident: **429** *PSIG*
   b. MOP at time of accident: **610** *PSIG*
   c. Did an overpressurization occur relating to the accident? ○ Yes ● No

a. Type of leak or rupture
   ● Leak: ● Pinhole ○ Connection Failure *(complete sec. H5)*
   ○ Puncture, diameter *(inches)* _____
   ○ Rupture: ○ Circumferential - Separation
   ○ Longitudinal - Tear/Crack, length *(inches)* _____
   Propagation Length, total, both sides *(feet)* _____
   ○ N/A
   ○ Other _____

b. Type of block valve used for isolation of immediate section:
   Upstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve
   Downstream: ☐ Manual ☐ Automatic ☒ Remote Control ☐ Check Valve

c. Length of segment isolated **127,301** ft
d. Distance between valves **127,301** ft
e. Is segment configured for internal inspection tools? ● Yes ○ No
f. Had there been an in-line inspection device run at the point of failure? ● Yes ○ No ○ Don't Know
   ○ Not Possible due to physical constraints in the system
g. If Yes, type of device run *(check all that apply)*

☒	High Resolution Magnetic Flux tool	Year run: **2003**
☐	Low Resolution Magnetic Flux tool	Year run:
☐	UT tool	Year run:
☒	Geometry tool	Year run: **2003**
☐	Caliper tool	Year run:
☐	Crack tool	Year run:
☐	Hard Spot tool	Year run:
☐	Other tool	Year run:

PART D - MATERIAL SPECIFICATION

1. Nominal pipe size *(NPS)* /**40**/ in.
2. Wall thickness /**.34**/ in.
3. Specification **API 5L** SMYS /**60000**/
4. Seam type **DSAW**
5. valve type _____
6. *Manufactured by* **US STEEL** *in year* /**1978**/

PART E - ENVIRONMENT

1. Area of accident
   ○ Under pavement ○ In open ditch
   ○ Underground ○ Above ground
   ○ Inside/under building ● Under water
   ○ Other _____

2. Depth of cover: **60** *inches*

PART F - CONSEQUENCES

1. Consequences *(check and complete all that apply)*

a.	Fatalities	Injuries
Number of operator employees:	0	0
Contractor employees working for operator:	0	0
General public:	0	0
Totals:	0	0

b. Was pipeline/segment shutdown due to leak? ● Yes ○ No
If Yes, how long? **5** days **20** hours **0** minutes

c. Product ignited ○ Yes ● No d. Explosion ○ Yes ● No
e. ☐ **Evacuation** *(general public only)* /_____/ people
Reason for Evacuation:
   ○ Precautionary by company
   ○ Evacuation required or initiated by public official

f. Elapsed time until area was made safe:
/____/ hr. /____/ min.

2. Environmental Impact
a. Wildlife Impact: Fish/aquatic ○ Yes ● No; Bird ○ Yes ● No; Terrestrial ○ Yes ● No
b. Soil Contamination ● Yes ○ No
   If Yes, estimated number of cubic yards: **2,440**
c. Long term impact assessment performed: ● Yes ○ No
d. Anticipated remediation ● Yes ○ No
   If Yes, Check all that apply: ☐ Surface water ☒ Groundwater ☒ Soil ☐ Vegetation ☐ Wildlife

e. Water Contamination: ● Yes ○ No *(If Yes, provide the following)*
   Amount in water **1.5** barrels
   Ocean/Seawater ● No ○ Yes
   Surface ○ No ● Yes
   Groundwater ○ No ● Yes
   Drinking water ● No ○ Yes *(If Yes, check below.)*
   ○ Private well ○ Public water intake

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PART G - LEAK DETECTION INFORMATION

1. Computer based leak detection capability in place? ○ Yes ● No
2. Was the release intially detected by? (check one):
   - ○ CPM/SCADA-based system with leak detection
   - ○ Static shut-in test or other pressure or leak test
   - ○ Local operating personnel, procedures or equipment
   - ○ Remote operating personnel, including controllers
   - ○ Air patrol or ground surveillance
   - ● A third party ○ Other (specify) _____
3. Estimated leak duration days **21** hours **0**

PART H - APPARENT CAUSE

Important: There are 25 numbered causes in this Part H. Check the box corresponding to the primary cause of the accident. Check one circle in each of the supplemental categories corresponding to the cause you indicate. Secc the instructions for guidance.

H1 - CORROSION

1. ○ External Corrosion
2. ○ Internal Corrosion

(Complete items a - e where applicable.)

a. Pipe Coating
- ○ Bare
- ○ Coated

b. Visual Examination
- ○ Localized Pitting
- ○ General Corrosion
- ○ Other _____

c. Cause of Corrosion
- ○ Galvanic
- ○ Atmospheric
- ○ Stray Current
- ○ Microbiological
- ○ Cathodic Protection Disrupted
- ○ Stress Corrosion Cracking
- ○ Selective Seam Corrosion
- ○ Other _____

d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?
○ No ○ Yes, Year Protection Started: /_____/

e. Was pipe previously damaged in the area of corrosion?
○ No ○ Yes => Estimated time prior to accident: /____/ years /____/ months Unknown ☐

H2 - NATURAL FORCES

3. ○ Earth Movement => ○ Earthquake ○ Subsidence ○ Landslide ○ Other _____
4. ○ Lightning
5. ○ Heavy Rains/Floods => ○ Washouts ○ Flotation ○ Mudslide ○ Scouring ○ Other _____
6. ○ Temperature => ○ Thermal stress ○ Frost heave ○ Frozen components ○ Other _____
7. ○ High Winds

H3 - EXCAVATION DAMAGE

8. ○ Operator Excavation Damage (including their contractors/Not Third Party)
9. ○ Third Party *(complete a-f)*
   - a. Excavator group
     ○ General Public ○ Government ○ Excavator other than Operator/subcontractor
   - b. Type: ○ Road Work ○ Pipeline ○ Water ○ Electric ○ Sewer ○ Phone/Cable
     ○ Landowner-not farming related ○ Farming ○ Raildroad
     ○ Other liquid or gas transmission pipeline-operator or their contractor
     ○ Nautical Operations ○ Other _____
   - c. Excavation was: ○ Open Trench ○ Sub-strata (boring, directional drilling, etc...)
   - d. Excavation was an ongoing activity (Month or longer) ○ Yes ○ No If Yes, Date of last contact /____/
   - e. Did operator get prior notification of excavation activity?
     ○ Yes; Date received: /____/ mo. /_____/ day /____/ yr. ○ No
     Notification received from: ○ One Call System ○ Excavator ○ Contractor ○ Landowner
   - f. Was pipeline marked as result of location request for excavation? ○ No ○ Yes (If Yes, check applicable items i - iv)
     - i. Temporary markings: ○ Flags ○ Stakes ○ Paint
     - ii. Permanent markings: ○ Yes ○ No
     - iii. Marks were (check one) : ○ Accurate ○ Not Accurate
     - iv. Were marks made within required time? ○ Yes ○ No

H4 - OTHER OUTSIDE FORCE DAMAGE

10. ○ Fire/Explosion as primary cause of failure => Fire/Explosion cause: ○ Man Made ○ Natural
11. ○ Car, truck or other vehicle not relating to excavation activity damaging pipe
12. ○ Rupture of Previously Damaged Pipe
13. ○ Vandalism

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H5 - MATERIAL AND/OR WELD FAILURES

Material

14. O Body of Pipe => O Dent O Gouge O Bend O Arc Burn O Other _____

15. O Component => O Valve O Fitting O Vessel O Extruded Outlet O Other _____

16. O Joint => O Gasket O O-Ring O Threads O Other _____

Weld

17. O Butt => O Pipe O Fabrication O Other _____

18. O Fillet => O Branch O Hot Tap O Fitting O Repair Sleeve O Other _____

19. O Pipe Seam => O LF ERW O DSAW O Seamless O Flash Weld
O HF ERW O SAW O Spiral O Other _____

Complete a-g if you indicate **any** *cause in part H5.*

a. Type of failure:
O Construction Defect => O Poor Workmanship O Procedure not followed O Poor Construction Procedures
O Material Defect

b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site? O Yes O No

c. Was part which leaked pressure tested before accident occurred? O Yes, complete d-g O No

d. Date of test: /_____/ yr. /_____/ mo. /_____/ day

e. Test medium: O Water O Inert Gas O Other _____

f. Time held at test pressure: /_____/ hr.

g. Estimated test pressure at point of accident: _____ *PSIG*

H6 - EQUIPMENT

20. O Malfunction of Control/Relief Equipment => O Control valve O Instrumentation O SCADA O Communications
O Block valve O Relief valve O Power failure
O Other _____

21. O Threads Stripped Broken Pipe Coupling => O Nipples O Valve Threads O Dresser Couplings
O Other _____

22. O Seal Failure => O Gasket O O-Ring O Seal/Pump Packing
O Other _____

H7 - INCORRECT OPERATION

23. O Incorrect Operation

a. Type O Inadequate Procedures O Inadequate Safety Practices O Failure to Follow Procedures
O Other _____

b. Number of employees involved who failed a post-accident test: drug test: /_____/ alcohol test /_____/

H8 - OTHER

24. O Miscellaneous, *describe:* _____

25. ● Unknown
O Investigation Complete ● Still Under Investigation (*Submit a supplemental report when investigation is complete*)

PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

(Attach additional sheets as necessary)

Refer to ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

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ATTACHMENT PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

ON 5/29/07 AT 07:30 HOURS, A LANDOWNER IN WINDER GA REPORTED THE ODOR OF GASOLINE AND A SMALL SHEEN AT THE LINE 01 CROSSING OF WILLIAMSON CREEK NEAR WINDER GA IN BARROW COUNTY. CPC AND CONTRACT ROW PERSONNEL WERE DISPATCHED TO THE LOCATION TO INVESTIGATE AND CONFIRMED THE PRESENCE OF A SMALL SHEEN AT THE PIPELINE CROSSING OF WILLIAMSON CREEK. THE AREA OF THE SHEEN MEASURED FROM 4 TO 6 INCHES IN DIAMETER AND APPEARED SPORADICALLY. THE SHEEN EVAPORATED QUICKLY AND DID NOT MIGRATE OR ACCUMULATE DOWNSTREAM. LINE 1 WAS SHUTDOWN AT 08:00 HOURS ON TUESDAY. THE SED RESPONSE TEAM WAS MOBILIZED TO THE SITE AND THE INCIDENT COMMAND STRUCTURE ESTABLISHED. CONTRACT CREWS ARRIVED ON SCENE AND INITIATED RESPONSE ACTIONS WHICH INCLUDED THE INSTALLATION OF TWO UNDERFLOW DAMS, RIVER BOOM AND ABSORBENT BOOM JUST DOWNSTREAM OF THE ROW CROSSING IN WILLIAMSON CREEK. TWO ADDITIONAL BOOM CONTAINMENT SITES WHERE INSTALLED AT THE HIGHWAY 316 AND BEN JOHNSON ROAD CROSSINGS OF WILLIAMSON CREEK DOWNSTREAM OF THE ROW. THE CREEK FLOW WAS DIVERTED AROUND THE ROW CROSSING USING AN UPSTREAM DAM AND PUMP. EXCAVATION AND INSPECTION OF THE LINE BEGAN ON 5/30/07 ONCE THE SITE WAS SECURE AND EMERGENCY RESPONSE AND CONTAINMENT MEASURES WERE IN PLACE. DRAIN-UP OPERATIONS OF THE AFFECTED SECTION OF LINE WERE ALSO INITIATED. INSPECTION OF THE LINE DID NOT IDENTIFY THE LOCATION OF THE LEAK DUE TO THE LOW RELEASE RATE AND REDUCED PRESSURE WITHIN THE PIPELINE. DRAIN-UP OF THE AFFECTED SEGMENT OF LINE 1 WAS COMPLETED ON THE EVENING OF JUNE 2 AND THE SUSPECT SECTION OF PIPE WAS CUT OUT AND REPLACED.

THE RELEASE WAS REPORTED TO THE NRC AT 10:00 HOURS ON 5/29/07 AND TO THE GEORGIA DEPARTMENT OF NATURAL RESOURSES (GA DNR) ENVIRONMENTAL PROTECTION DIVISION (EPD) AT 10:00 HOURS ON 5/29/07 DUE TO THE PRESENCE OF A SHEEN IN THE CREEK AND POTENTIAL IMPACTS TO GROUNDWATER.

APPROXIMATELY 3046 TONS OF IMPACTED SOIL WERE EXCAVATED IN THE VICINITY OF THE RELEASE AREA AND TRANSPORTED TO THE NEARBY REPUBLIC LANDFILL FOR DISPOSAL. LABORATORY ANALYSES OF THE SOIL INDICATE THAT AN ESTIMATED 139 GALLONS OF PRODUCT WERE RELEASED TO AND CONTAINED WITHIN THE IMPACTED SOIL. A TOTAL OF 25 GALLONS OF FREE PHASE PRODUCT WAS RECOVERED FROM THE EXCAVATION AREA. AN ESTIMATED 38 GALLONS OF THE RELEASED PRODUCT WAS LOST TO EVAPORATION. BASED ON THESE ESTIMATES, THE TOTAL RELEASE VOLUME IS ESTIMATED TO BE APPROXIMATELY 200 GALLONS. ENVIRONMENTAL CLEAN-UP OPERATIONS WERE COMPLETED ON 6/11/07. A REPORT DOCUMENTING RESPONSE AND REMEDIATION ACTIONS WITH A REQUEST FOR SITE CLOSURE WILL BE PREPARED AND SUBMITTED TO THE GA EPD IN THE NEAR FUTURE.

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U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS** **Report format corresponds to Form PHMSA F 7000-1 (01-2001)**	**Original Report Date**	**June 25, 2007**
		No.	**20070173 - 6758**

PART A – GENERAL INFORMATION					
N	**Original Report**	**Y**	**Supplemental Report**	**Y**	**Final Report**
Last Revision Date			02/01/2008		
1. Operator Name and Address					
a. Operator's 5-digit Identification Number			2552		
b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if known)					
c. Name of Operator			COLONIAL PIPELINE COMPANY		
d. Operator street address			1185 SANCTUARY PARKWAY, SUITE 100		
e. Operator address		City	ALPHARETTA		
		County or Parish	FULTON		
		State	GA		
		Zip code	30004		
2. Time and date of the accident					
		Hour	07:30		
		Date of the accident	05/29/2007		
3. Location of accident					
a. Latitude			33.5756		
Longitude			-83.4724		
b. City			WINDER		
County or Parish			BARROW		
c. State			GA		
Zip Code					
d. Mile Post/Valve Station					
Survey Station No			2785+80		
4. Telephone Report					
NRC Report Number			836773		
Date			05/29/2007		
5. Losses (Estimated)					
Public/Community Losses reimbursed by operator					
Public/private property damage		$	200,000		
Cost of emergency response phase		$	1,300,000		
Cost of environmental remediation		$	180,000		
Other Costs		$	0		
Describe					
Operator Losses					
Value of product lost		$	600		
Value of operator property damage		$	0		
Other Costs		$	0		
Describe					
Total Costs		$	1,680,600		
6. Commodity Spilled					
Commodity spilled (yes/no)			Y		
a. Name of commodity spilled			GASOLINE		
b. Classification of commodity spilled			GASOLINE, DIESEL, FUEL OIL OR OTHER PETROLEUM PRODUCT WHICH IS A LIQUID AT AMBIENT CONDITIONS		
c. Estimated amount of commodity involved					
Unit of Measure			BARRELS		
Amount Spilled			5.00		
Amount Recovered			4.00		
CAUSES FOR SMALL SPILLS			CORROSION		
PART B – PREPARER AND AUTHORIZED SIGNATURE					

Preparer's Name		A. MAC TAYLOR	
Area Code and Telephone Number		6787622872	
Preparer's E-mail Address		ATAYLOR@COLPIPE.COM	
Area Code and Facsimile Number		6787622464	
PART C – ORIGIN OF THE ACCIDENT			
1. Additional location information			
a. Line segment name or ID		LINE 1	
b. Accident on Federal Land other than Outer Continental Shelf		NO	
c. Is pipeline Interstate		Y	
Offshore		N	
d. Area			
Block #			
State			
Outer Continental Shelf			
2. Location of system involved			
Operator's Property		NO	
Pipeline Right of Way		Y	
High Consequence Area (HCA)		N	
Describe HCA			
3. Part of system involved in accident		ONSHORE PIPELINE, INCLUDING VALVE SITES	
Other (specify)			
If failure occurred on Pipeline, complete items a-g			
a. Leak or Rupture		LEAK	
Type of Leak		PINHOLE	
- Puncture, diameter *(inches)*			
Type of Rupture			
- Tear/Crack, length *(inches)*			
- Propagation Length, total, both sides *(feet)*			
Other (specify)			
b. Type of block valve used for isolation immediate section			
Upstream			
Manual		NO	
Automatic		NO	
Remote Control		YES	
Check Valve		NO	
Downstream			
Manual		NO	
Automatic		NO	
Remote Control		YES	
Check Valve		NO	
c. Length of segment isolated (ft)		127301	
d. Distance between valves (ft)		127301	
e. Is segment configured for internal inspection tools?		YES	
f. Had there been an in-line inspection device run at the point of failure?		YES	
g. If Yes, type of device run			
High Resolution Magnetic Flux tool	YES	Year run	2003
Low Resolution Magnetic Flux tool	NO	Year run	
UT tool	NO	Year run	
Geometry tool	YES	Year run	2003
Caliper tool	NO	Year run	
Crack tool	NO	Year run	
Hard Spot tool	NO	Year run	
Other tool	NO	Year run	
4. Failure occurred on		BODY OF PIPE	
Other (specify)			
Year the component that failed was installed		1978	
5. Maximum operating pressure (MOP)			

a. Estimated pressure at point and time of accident (PSIG)	429	
b. MOP at time of accident (PSIG)	743.00	
c. Did an over pressurization occur relating to the accident?	N	
PART D – MATERIAL SPECIFICATION		
1. Nominal pipe size (NPS) (inches)	40	
2. Wall thickness (inches)	0.34	
3. Specification	API 5L	
SMYS	60000	
4. Seam type	DSAW	
5. Valve type		
6. Manufactured by	US STEEL	
in year	1978	
PART E - ENVIRONMENT		
1. Area of accident	UNDER WATER	
Other (specify)		
2. Depth of cover (inches)	60	
PART F - CONSEQUENCES		
1. Consequences	**Fatalities**	**Injuries**
a. Number of operator employees	0	0
Contractor employees working for operator	0	0
General public	0	0
Totals	0	0
b. Was pipeline/segment shutdown due to leak?	Y	
If Yes, how long? Days	5	
Hours	20	
Minutes	0	
c. Product ignited	Gas did not Ignite	
d. Explosion	NO EXPLOSION	
e. Evacuation *(general public only)*	N	
Number of people		
Reason for Evacuation		
f. Elapsed time until area was made safe		
Hours		
Minutes		
2. Environmental Impact		
a. Wildlife Impact		
Fish/aquatic	N	
Birds	N	
Terrestrial	N	
b. Soil Contamination	Y	
If Yes, estimated number of cubic yards	2440	
c. Long term impact assessment performed	Y	
d. Anticipated remediation	Y	
If Yes, check all that apply		
Surface Water	N	
Groundwater	Y	
Soil	Y	
Vegetation	N	
Wildlife	N	
e. Water Contamination	Y	
Amount in water (barrels)	1	
Ocean/Seawater	N	
Surface	Y	
Groundwater	Y	
Drinking water	N	
Drinking water source		
PART G – LEAK DETECTION INFORMATION		
1. Computer based leak detection capability in place?	N	
2. Was the release initially detected by?	A THIRD PARTY	
Other (specify)		

3. Estimated leak duration Days	21
Hours	0
PART H – APPARENT CAUSE	
H1 – CORROSION	
1. External Corrosion	Yes
2. Internal Corrosion	
Complete items a-e where applicable	
a. Pipe Coating	COATED
b. Visual Examination	OTHER
Other (specify)	CORROSION FATIGUE
c. Cause of Corrosion	STRESS CORROSION CRACKING
Other (specify)	
d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?	Y
Year Protection Started	1978
e. Was pipe previously damaged in the area of corrosion?	Y
Estimated time prior to accident Years	3
Months	0
H2 – NATURAL FORCES	
3. Earth Movement	
Description	
Other (specify)	
4. Lightning	
5. Heavy Rains/Floods	
Description	
Other (specify)	
6. Temperature	
Description	
Other (specify)	
7. High Winds	
H3 – EXCAVATION DAMAGE	
8. Operator Excavation Damage (including their contractors / Not Third Party)	
9. Third Party	
a. Excavator group	
b. Type	
Other (specify)	
c. Excavation was	
d. Excavation was ongoing activity (Month or longer)	
If Yes, Date of last contact	
e. Did operator get prior notification of excavation activity?	
If Yes; Date received	null
Notification received from	
f. Was pipeline marked?	
i. Temporary markings	
ii. Permanent markings	
iii. Marks were	
iv. Were marks made within required time?	
H4 – OTHER OUTSIDE FORCE DAMAGE	
10. Fire/Explosion as primary cause of failure	
Fire/Explosion cause	
11. Car, truck or other vehicle not relating to excavation activity damaging pipe	
12. Rupture of Previously Damaged Pipe	
13. Vandalism	
H5 – MATERIAL AND/OR WELD FAILURES	
Material	
14. Body of Pipe	
Description	

Other (specify)	
15. Component	
Description	
Other (specify)	
16. Joint	
Description	
Other (specify)	
Weld	
17. Butt	
Description	
Other (specify)	
18. Fillet	
Description	
Other (specify)	
19. Pipe Seam	
Description	
Other (specify)	
Complete a-g if you indicate any cause in part H5	
a. Type of failure	
Construction Defect	NO DATA
Description	
Material Defect	NO DATA
b. Was failure due to pipe damage sustained in transportation to the construction or fabrication site?	
c. Was part which leaked pressure tested before accident occurred?	
d. Date of test	
Year	
Month	
Day	
e. Test medium	
Other (specify)	
f. Time held at test pressure (hr)	
g. Estimated test pressure at point of incident (PSIG)	
H6 – EQUIPMENT	
20. Malfunction of Control/Relief Equipment	
Description	
Other (specify)	
21. Threads Stripped, Broken Pipe Coupling	
Description	
Other (specify)	
22. Seal Failure	
Description	
Other (specify)	
H7 – INCORRECT OPERATION	
23. Incorrect Operation	
a. Type	
Other (specify)	
b. Number of employees involved who failed a post-accident test	
Drug test	
Alcohol test	
H8 - OTHER	
24. Miscellaneous	
Describe	
25. Unknown	
Describe	
PART I – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT	
ON 5/29/07 AT 07:30 HOURS, A LANDOWNER IN WINDER GA REPORTED THE ODOR OF GASOLINE AND A SMALL SHEEN AT THE LINE 01 CROSSING OF WILLIAMSON CREEK NEAR WINDER GA IN BARROW COUNTY. CPC AND CONTRACT ROW PERSONNEL WERE DISPATCHED TO THE LOCATION TO INVESTIGATE AND CONFIRMED THE PRESENCE OF A SMALL SHEEN AT THE	

PIPELINE CROSSING OF WILLIAMSON CREEK. THE AREA OF THE SHEEN MEASURED FROM 4 TO 6 INCHES IN DIAMETER AND APPEARED SPORADICALLY. THE SHEEN EVAPORATED QUICKLY AND DID NOT MIGRATE OR ACCUMULATE DOWNSTREAM. LINE 1 WAS SHUTDOWN AT 08:00 HOURS ON TUESDAY. THE SED RESPONSE TEAM WAS MOBILIZED TO THE SITE AND THE INCIDENT COMMAND STRUCTURE ESTABLISHED. CONTRACT CREWS ARRIVED ON SCENE AND INITIATED RESPONSE ACTIONS WHICH INCLUDED THE INSTALLATION OF TWO UNDERFLOW DAMS, RIVER BOOM AND ABSORBENT BOOM JUST DOWNSTREAM OF THE ROW CROSSING IN WILLIAMSON CREEK. TWO ADDITIONAL BOOM CONTAINMENT SITES WHERE INSTALLED AT THE HIGHWAY 316 AND BEN JOHNSON ROAD CROSSINGS OF WILLIAMSON CREEK DOWNSTREAM OF THE ROW. THE CREEK FLOW WAS DIVERTED AROUND THE ROW CROSSING USING AN UPSTREAM DAM AND PUMP. EXCAVATION AND INSPECTION OF THE LINE BEGAN ON 5/30/07 ONCE THE SITE WAS SECURE AND EMERGENCY RESPONSE AND CONTAINMENT MEASURES WERE IN PLACE. DRAIN-UP OPERATIONS OF THE AFFECTED SECTION OF LINE WERE ALSO INITIATED. INSPECTION OF THE LINE DID NOT IDENTIFY THE LOCATION OF THE LEAK DUE TO THE LOW RELEASE RATE AND REDUCED PRESSURE WITHIN THE PIPELINE. DRAIN-UP OF THE AFFECTED SEGMENT OF LINE 1 WAS COMPLETED ON THE EVENING OF JUNE 2 AND AN 80-FOOT SECTION OF PIPE WAS CUT OUT AND REPLACED. THIRD-PARTY EVALUATION DETERMINED THAT THE SOURCE OF THE LEAK WAS A CIRCUMFERENTIALLY ORIENTED THROUGH-WALL CRACK APPROXIMATELY 3.5 INCHES LONG LOCATED WITHIN THE SECTION OF PIPE REMOVED. THE THIRD-PARTY REPORT STATES THAT THE CRACK BEGAN AND GREW DUE TO STRESS CORROSION CRACKING, THEN GREW BY CORROSION FATIGUE, AND THEN FAILED DUE TO DUCTILE OVERSTRESS OF THE REMAINING LIGAMENT. THE RELEASE WAS REPORTED TO THE NRC AT 10:00 HOURS ON 5/29/07 AND TO THE GEORGIA DEPARTMENT OF NATURAL RESOURSES (GA DNR) ENVIRONMENTAL PROTECTION DIVISION (EPD) AT 10:00 HOURS ON 5/29/07 DUE TO THE PRESENCE OF A SHEEN IN THE CREEK AND POTENTIAL IMPACTS TO GROUNDWATER. APPROXIMATELY 3046 TONS OF IMPACTED SOIL WERE EXCAVATED IN THE VICINITY OF THE RELEASE AREA AND TRANSPORTED TO THE NEARBY REPUBLIC LANDFILL FOR DISPOSAL. LABORATORY ANALYSES OF THE SOIL INDICATE THAT AN ESTIMATED 139 GALLONS OF PRODUCT WERE RELEASED TO AND CONTAINED WITHIN THE IMPACTED SOIL. A TOTAL OF 25 GALLONS OF FREE PHASE PRODUCT WAS RECOVERED FROM THE EXCAVATION AREA. AN ESTIMATED 38 GALLONS OF THE RELEASED PRODUCT WAS LOST TO EVAPORATION. BASED ON THESE ESTIMATES, THE TOTAL RELEASE VOLUME IS ESTIMATED TO BE APPROXIMATELY 200 GALLONS. ENVIRONMENTAL CLEAN-UP OPERATIONS WERE COMPLETED ON 6/11/07. A REPORT DOCUMENTING RESPONSE AND REMEDIATION ACTIONS WITH A REQUEST FOR SITE CLOSURE WAS SUBMITTED TO THE GA EPD IN DECEMBER 2007.

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	07/01/2010
	No.	20100137 - 15181 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
	Yes		**Yes**

Last Revision Date:	
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	300044738
4. Local time *(24-hr clock)* and date of the Accident:	06/09/2010 08:00
5. Location of Accident:	
Latitude:	33.59667
Longitude:	-81.95333
6. National Response Center Report Number (if applicable):	
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Mixture of Refined Products (transmix or other mixture)
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	10.83
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	1.31
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	No
- If No, Explain:	part of facility isolated
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	06/09/2010 08:00
18b. Local time Operator resources arrived on site:	06/09/2010 08:01

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	South Carolina
3. Zip Code:	29860
4. City	North Augusta
5. County or Parish	Edgefield
6. Operator-designated location:	Milepost/Valve Station
Specify:	N. Augusta DF
7. Pipeline/Facility name:	North Augusta Delivery Facility
8. Segment name/ID:	29
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Aboveground
Specify:	Typical aboveground facility piping or appurtenance
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pump
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1992
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Crack
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	Yes
- Soil	Yes
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	Yes
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	1.00
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$
8b. Estimated cost of commodity lost	$ 885
8c. Estimated cost of Operator's property damage & repairs	$ 1,000
8d. Estimated cost of Operator's emergency response	$
8e. Estimated cost of Operator's environmental remediation	$ 25,000
8f. Estimated other costs	$
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 26,885

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	80.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	725.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Notification From Public
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues were not a cause or a contributing factor to the accident
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Threaded Connection/Coupling Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	Pipe Nipple
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	Yes
- If Other, Describe:	unknown
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On 9 June, 2010, at approximately 0800 EDT, a third party reported to the local operator that he had observed product leaking from the vicinity of the transmix injection pump. The injection pump was immediately shut down and the Operations Manager was notified. An inspection of the system revealed a crack in a 3/4" schedule 80 pipe nipple that was part of the pump's discharge releif system. The pipe nipple with the crack was removed and a permanent replecement was installed. Contract crews removed approximately 6 cubic yards of soil in the vicinity of the pump. Additional assessment revealed product had migrated into the sandy soil to the depth of groundwater which is approximately 15 feet below land surfzce. APEX Environmental consultant has began formulating a remediation plan using chemical oxidation agents. Currently awaiting approval from SCDHEC to begin remediation. Excavated soil will be transported to an approved disposal facility. Lori Landmeyer with SCDHEC was notified of the release at 1600 EDT on 9 June,2010. She requested follow up information as it becomes available. The released product was immediately absorbed into the soil around the pump base, therefore evaporative losses were considered to be negligible. Assessment activities indicate that approximately 66 tons of soil were impacted by the release. Laboratory analysis of soil samples collected from the impacted area indicate that an estimated 455 gallons of product are contained within impacted soils. The total release volume is based upon the amount of product within impacted soils. An estimated 55 gallons of the released product were recovered in the 6 cubic yards of excavated soil which will be sent off-site for disposal. No impacts were observed in adjacent groundwater monitoring wells, however, assessment activities indicate that groundwater may be impacted in the immediate vicinity of the release. Chemical oxidation of impacted soil has been used successfully in the recent past at the facility. Reapplication of this technology is expected to fully address impacts to soil and groundwater from this release. Surface water was not impacted by this release.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylorj@colpipe.com
Preparer's Facsimile Number	6787622315
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylorj@colpipe.com
Date	07/01/2010

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	07/01/2010
	No.	20100137 - 18416 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	08/06/2013		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	06/09/2010 08:00		
5. Location of Accident:			
Latitude:	33.59667		
Longitude:	-81.95333		
6. National Response Center Report Number (if applicable):			
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):			
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Mixture of Refined Products (transmix or other mixture)		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	10.83		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	1.31		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	No
- If No, Explain:	part of facility isolated
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	06/09/2010 08:00
18b. Local time Operator resources arrived on site:	06/09/2010 08:01

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	South Carolina
3. Zip Code:	29860
4. City	North Augusta
5. County or Parish	Edgefield
6. Operator-designated location:	Milepost/Valve Station
Specify:	N. Augusta DF
7. Pipeline/Facility name:	North Augusta Delivery Facility
8. Segment name/ID:	29
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Aboveground
Specify:	Typical aboveground facility piping or appurtenance
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pump
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1992
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Crack
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	Yes
- Soil	Yes
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	Yes
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	1.00
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 885
8c. Estimated cost of Operator's property damage & repairs	$ 1,000
8d. Estimated cost of Operator's emergency response	$ 0
8e. Estimated cost of Operator's environmental remediation	$ 25,000
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 26,885

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	80.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	725.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Notification From Public
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues were not a cause or a contributing factor to the accident
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Threaded Connection/Coupling Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	Pipe Nipple
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	Yes
- If Other, Describe:	unknown
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On 9 June, 2010, at approximately 0800 EDT, a third party reported to the local operator that he had observed product leaking from the vicinity of the transmix injection pump. The injection pump was immediately shut down and the Operations Manager was notified. An inspection of the system revealed a crack in a 3/4" schedule 80 pipe nipple that was part of the pump's discharge releif system. The pipe nipple with the crack was removed and a permanent replecement was installed. Contract crews removed approximately 6 cubic yards of soil in the vicinity of the pump. Additional assessment revealed product had migrated into the sandy soil to the depth of groundwater which is approximately 15 feet below land surfzce. APEX Environmental consultant has began formulating a remediation plan using chemical oxidation agents. Currently awaiting approval from SCDHEC to begin remediation. Excavated soil will be transported to an approved disposal facility. Lori Landmeyer with SCDHEC was notified of the release at 1600 EDT on 9 June,2010. She requested follow up information as it becomes available. The released product was immediately absorbed into the soil around the pump base, therefore evaporative losses were considered to be negligible. Assessment activities indicate that approximately 66 tons of soil were impacted by the release. Laboratory analysis of soil samples collected from the impacted area indicate that an estimated 455 gallons of product are contained within impacted soils. The total release volume is based upon the amount of product within impacted soils. An estimated 55 gallons of the released product were recovered in the 6 cubic yards of excavated soil which will be sent off-site for disposal. No impacts were observed in adjacent groundwater monitoring wells, however, assessment activities indicate that groundwater may be impacted in the immediate vicinity of the release. Chemical oxidation of impacted soil has been used successfully in the recent past at the facility. Reapplication of this technology is expected to fully address impacts to soil and groundwater from this release. Surface water was not impacted by this release.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylorj@colpipe.com
Preparer's Facsimile Number	6787622315
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylorj@colpipe.com
Date	08/06/2013

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100249 - 15383 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
	Yes		

Last Revision Date:	
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	11/02/2010 09:00
5. Location of Accident:	
Latitude:	29.975
Longitude:	-94.056
6. National Response Center Report Number (if applicable):	
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	3.57
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	3.57
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77705
4. City	
5. County or Parish	
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Seal or Packing
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	
3. Long term impact assessment performed or planned:	
4. Anticipated remediation:	
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	No
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	
5c. Name of body of water, if commonly known:	
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 350
8c. Estimated cost of Operator's property damage & repairs	$ 10,000
8d. Estimated cost of Operator's emergency response	$ 24,650
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 35,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	
3. Describe the pressure on the system or facility relating to the Accident (psig):	
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	
If Yes -	
6a. Was it operating at the time of the Accident?	
6b. Was it fully functional at the time of the Accident?	
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	

2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G8 - Other Incident Cause

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	

11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	

2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	

- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	

- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	

- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	

3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	Unknown
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	Still under investigation, cause of Accident to be determined* (*Supplemental Report required)

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	
Preparer's Telephone Number	
Preparer's E-mail Address	
Preparer's Facsimile Number	
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	
Date	11/22/2010

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100249 - 15563 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	02/02/2011		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	11/02/2010 09:00		
5. Location of Accident:			
Latitude:	29.975		
Longitude:	-94.056		
6. National Response Center Report Number (if applicable):			
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):			
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	3.57		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	3.57		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77705
4. City	Beaumont
5. County or Parish	Jefferson
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	Hebert Station
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	stem seal
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Seal or Packing
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	
3. Long term impact assessment performed or planned:	
4. Anticipated remediation:	
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	3.36
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 350
8c. Estimated cost of Operator's property damage & repairs	$ 10,000
8d. Estimated cost of Operator's emergency response	$ 24,650
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 35,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	20.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller(s) or control room issues were not the cause of or a contributing factor to the accident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	O-Ring
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	Yes
- If Other, Describe:	worn
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 9:00 A.M. CST on November 2, 2010, a Hebert Station operator found product floating on water (from the heavy rains earlier that morning) around the Hebert origination valves. The operator notified the operations manager who notified the district environmental manager, local project manager and the director of operations at approximately 9:15 A.M. Contractors and a vacuum truck arrived at 10:30 A.M. and collected approximately 119 bbls of standing water and product from the area. Approximately 7 cubic yards of contaminated soil were removed and the source of the release was determined to be the origination check valve shaft seals. The seals were replaced around 4:00 P.M. CST and the system was returned to operations. Approximately, 141 gallons of free product were collected and the soil analysis determined that there were an additional 9 gallons of product in the contaminated soil. The total released and recoverd volume was determined to be 150 gallons. The incident analysis had not been completed at the time of the initial report so the root cause was submitted on the final report. The event did not meet state reporting requirements.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	
Preparer's Telephone Number	
Preparer's E-mail Address	
Preparer's Facsimile Number	
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	
Date	02/02/2011

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100249 - 15666 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	03/07/2011		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	11/02/2010 09:00		
5. Location of Accident:			
Latitude:	29.975		
Longitude:	-94.056		
6. National Response Center Report Number (if applicable):			
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):			
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	3.57		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	3.57		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77705
4. City	Beaumont
5. County or Parish	Jefferson
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	Hebert Station
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	stem seal
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Seal or Packing
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	
3. Long term impact assessment performed or planned:	
4. Anticipated remediation:	
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	3.36
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 350
8c. Estimated cost of Operator's property damage & repairs	$ 10,000
8d. Estimated cost of Operator's emergency response	$ 24,650
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 35,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	20.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller(s) or control room issues were not the cause of or a contributing factor to the accident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	O-Ring
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	Yes
- If Other, Describe:	worn
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 9:00 A.M. CST on November 2, 2010, a Hebert Station operator found product floating on water (from the heavy rains earlier that morning) around the Hebert origination valves. The operator notified the operations manager who notified the district environmental manager, local project manager and the director of operations at approximately 9:15 A.M. Contractors and a vacuum truck arrived at 10:30 A.M. and collected approximately 119 bbls of standing water and product from the area. Approximately 7 cubic yards of contaminated soil were removed and the source of the release was determined to be the origination check valve shaft seals. The seals were replaced around 4:00 P.M. CST and the system was returned to operations. Approximately, 141 gallons of free product were collected and the soil analysis determined that there were an additional 9 gallons of product in the contaminated soil. The total released and recoverd volume was determined to be 150 gallons. The incident analysis had not been completed at the time of the initial report so the root cause was submitted on the final report. The event did not meet state reporting requirements.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622465
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	03/07/2011

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100249 - 15667 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**

Last Revision Date:	03/07/2011
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	11/02/2010 09:00
5. Location of Accident:	
Latitude:	29.975
Longitude:	-94.056
6. National Response Center Report Number (if applicable):	
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	3.57
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	3.57
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77705
4. City	Beaumont
5. County or Parish	Jefferson
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	Hebert Station
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	stem seal
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Seal or Packing
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	
3. Long term impact assessment performed or planned:	
4. Anticipated remediation:	
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	3.36
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 350
8c. Estimated cost of Operator's property damage & repairs	$ 10,000
8d. Estimated cost of Operator's emergency response	$ 24,650
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 35,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	20.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller(s) or control room issues were not the cause of or a contributing factor to the accident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	O-Ring
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	Yes
- If Other, Describe:	worn
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 9:00 A.M. CST on November 2, 2010, a Hebert Station operator found product floating on water (from the heavy rains earlier that morning) around the Hebert origination valves. The operator notified the operations manager who notified the district environmental manager, local project manager and the director of operations at approximately 9:15 A.M. Contractors and a vacuum truck arrived at 10:30 A.M. and collected approximately 119 bbls of standing water and product from the area. Approximately 7 cubic yards of contaminated soil were removed and the source of the release was determined to be the origination check valve shaft seals. The seals were replaced around 4:00 P.M. CST and the system was returned to operations. Approximately, 141 gallons of free product were collected and the soil analysis determined that there were an additional 9 gallons of product in the contaminated soil. The total released and recoverd volume was determined to be 150 gallons. The incident analysis had not been completed at the time of the initial report so the root cause was submitted on the final report. The event did not meet state reporting requirements.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622465
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	03/07/2011

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100249 - 18417 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**

Last Revision Date:	08/06/2013
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	11/02/2010 09:00
5. Location of Accident:	
Latitude:	29.975
Longitude:	-94.056
6. National Response Center Report Number (if applicable):	
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	3.57
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	3.57
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77705
4. City	Beaumont
5. County or Parish	Jefferson
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	Hebert Station
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	stem seal
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Seal or Packing
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	
3. Long term impact assessment performed or planned:	
4. Anticipated remediation:	
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	3.36
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 350
8c. Estimated cost of Operator's property damage & repairs	$ 10,000
8d. Estimated cost of Operator's emergency response	$ 24,650
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 35,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	20.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller(s) or control room issues were not the cause of or a contributing factor to the accident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	O-Ring
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	Yes
- If Other, Describe:	worn
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 9:00 A.M. CST on November 2, 2010, a Hebert Station operator found product floating on water (from the heavy rains earlier that morning) around the Hebert origination valves. The operator notified the operations manager who notified the district environmental manager, local project manager and the director of operations at approximately 9:15 A.M. Contractors and a vacuum truck arrived at 10:30 A.M. and collected approximately 119 bbls of standing water and product from the area. Approximately 7 cubic yards of contaminated soil were removed and the source of the release was determined to be the origination check valve shaft seals. The seals were replaced around 4:00 P.M. CST and the system was returned to operations. Approximately, 141 gallons of free product were collected and the soil analysis determined that there were an additional 9 gallons of product in the contaminated soil. The total released and recoverd volume was determined to be 150 gallons. The incident analysis had not been completed at the time of the initial report so the root cause was submitted on the final report. The event did not meet state reporting requirements.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622465
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	08/06/2013

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100251 - 15385 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
	Yes		

Last Revision Date:	
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009
4. Local time *(24-hr clock)* and date of the Accident:	11/03/2010 11:00
5. Location of Accident:	
Latitude:	29.90801
Longitude:	-94.01201
6. National Response Center Report Number (if applicable):	
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	3.36
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	3.36
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77640
4. City	
5. County or Parish	
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Other
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	
3. Long term impact assessment performed or planned:	
4. Anticipated remediation:	
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	3.36
5c. Name of body of water, if commonly known:	None
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 350
8c. Estimated cost of Operator's property damage & repairs	$ 15,650
8d. Estimated cost of Operator's emergency response	$ 5,000
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 21,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	50.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room was not the cause or a contributing factor to the accident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G8 - Other Incident Cause

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	Unknown
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	Still under investigation, cause of Accident to be determined* (*Supplemental Report required)

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	
Preparer's Telephone Number	
Preparer's E-mail Address	
Preparer's Facsimile Number	
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	
Date	11/22/2010

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100251 - 15564 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	
Last Revision Date:	02/02/2011		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	11/03/2010 11:00		
5. Location of Accident:			
Latitude:	29.90801		
Longitude:	-94.01201		
6. National Response Center Report Number (if applicable):			
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):			
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	3.36		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	3.36		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77640
4. City	Port Arthur
5. County or Parish	Jefferson
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	North Port Arthur Station
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	In underground enclosed space (e.g. vault)
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	gasket
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	
3. Long term impact assessment performed or planned:	
4. Anticipated remediation:	
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	3.36
5c. Name of body of water, if commonly known:	None
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 330
8c. Estimated cost of Operator's property damage & repairs	$ 15,670
8d. Estimated cost of Operator's emergency response	$ 5,000
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 21,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	50.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room was not the cause or a contributing factor to the accident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	Gasket
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	Yes
- If Other, Describe:	still under investigation
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 11:00 A.M. CST on November 3, 2010 during a facility inspection, an operator found product floating on water in the line 2 injection valve access well at North Port Arthur Station. Technicians and contractors were contacted and the operations manager was notified at 11:15 A.M. and the director of operations was notified at 11:30 A.M. Contractors and a vacuum truck arrived at 11:30 A.M. and recovered approximately 1,879 gallons of water and product from the access well. The source of the release was identified as the left guide plug on the injection valve. The gasket was replaced on the plug and the bolts were retightened and the system was returned to service at 9:00 P.M. CST. All product was contained in the access well so there was no contaminated soil. Approximately, 141 gallons of free product were collected during the recovery process. The incident analysis had not been completed at the time of the initial report so the root cause will be submitted on the final report. The event did not meet state reporting requirements.

2/1/11 Update

The final cost estimate was submitted. The root cause is still under investigation, Technical Services is working with the valve manufacture to determine the cause of the failure.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	
Preparer's Telephone Number	
Preparer's E-mail Address	
Preparer's Facsimile Number	
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	
Date	02/02/2011

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100251 - 15841 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**

Last Revision Date:	06/03/2011
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	11/03/2010 11:00
5. Location of Accident:	
Latitude:	29.90801
Longitude:	-94.01201
6. National Response Center Report Number (if applicable):	
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	3.36
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	3.36
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77640
4. City	Port Arthur
5. County or Parish	Jefferson
6. Operator-designated location:	Milepost/Valve Station
Specify:	injection val
7. Pipeline/Facility name:	North Port Arthur Station
8. Segment name/ID:	Line 2
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	In underground enclosed space (e.g. vault)
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	No
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	3.36
5c. Name of body of water, if commonly known:	None
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 330
8c. Estimated cost of Operator's property damage & repairs	$ 15,670
8d. Estimated cost of Operator's emergency response	$ 5,000
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 21,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	50.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room was not the cause or a contributing factor to the accident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	Gasket
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	Yes
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 11:00 A.M. CST on November 3, 2010 during a facility inspection, an operator found product floating on water in the line 2 injection valve access well at North Port Arthur Station. Technicians and contractors were contacted and the operations manager was notified at 11:15 A.M. and the director of operations was notified at 11:30 A.M. Contractors and a vacuum truck arrived at 11:30 A.M. and recovered approximately 1,879 gallons of water and product from the access well. The source of the release was identified as the left guide plug on the injection valve. The gasket was replaced on the plug and the bolts were retightened and the system was returned to service at 9:00 P.M. CST. All product was contained in the access well so there was no contaminated soil. Approximately, 141 gallons of free product were collected during the recovery process. The event did not meet state reporting requirements.

The incident analysis was completed on June 2, 2011. Technical Services worked with the valve manufacture to determine that the cause of the failure was significant wear of the guide plug. The wear caused the guide plug to become loose and allowed product to escape.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622465
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	06/03/2011

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/22/2010
	No.	20100251 - 18418 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**

Last Revision Date:	08/06/2013
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	11/03/2010 11:00
5. Location of Accident:	
Latitude:	29.90801
Longitude:	-94.01201
6. National Response Center Report Number (if applicable):	
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	3.36
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	3.36
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77640
4. City	Port Arthur
5. County or Parish	Jefferson
6. Operator-designated location:	Milepost/Valve Station
Specify:	injection val
7. Pipeline/Facility name:	North Port Arthur Station
8. Segment name/ID:	Line 2
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	In underground enclosed space (e.g. vault)
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Valve
- If Pipe, specify:	
3a. Nominal diameter of pipe (in):	

3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	Auxiliary or Other Valve
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	No
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	3.36
5c. Name of body of water, if commonly known:	None
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 330
8c. Estimated cost of Operator's property damage & repairs	$ 15,670
8d. Estimated cost of Operator's emergency response	$ 5,000
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 21,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	50.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room was not the cause or a contributing factor to the accident.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	Gasket
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	Yes
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 11:00 A.M. CST on November 3, 2010 during a facility inspection, an operator found product floating on water in the line 2 injection valve access well at North Port Arthur Station. Technicians and contractors were contacted and the operations manager was notified at 11:15 A.M. and the director of operations was notified at 11:30 A.M. Contractors and a vacuum truck arrived at 11:30 A.M. and recovered approximately 1,879 gallons of water and product from the access well. The source of the release was identified as the left guide plug on the injection valve. The gasket was replaced on the plug and the bolts were retightened and the system was returned to service at 9:00 P.M. CST. All product was contained in the access well so there was no contaminated soil. Approximately, 141 gallons of free product were collected during the recovery process. The event did not meet state reporting requirements.

The incident analysis was completed on June 2, 2011. Technical Services worked with the valve manufacture to determine that the cause of the failure was significant wear of the guide plug. The wear caused the guide plug to become loose and allowed product to escape.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622465
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	08/06/2013

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	12/06/2010
	No.	20100276 - 15417 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
	Yes		

Last Revision Date:	
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	11/08/2010 11:15
5. Location of Accident:	
Latitude:	29.85836
Longitude:	-94.97929
6. National Response Center Report Number (if applicable):	
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Gasoline (non-Ethanol)
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	.48
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	.48
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77521
4. City	Baytown
5. County or Parish	
6. Operator-designated location:	Milepost/Valve Station
Specify:	Cedar Bayou
7. Pipeline/Facility name:	Colonial
8. Segment name/ID:	Line 1
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Originated on Operator-controlled property, but then flowed or migrated off the property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Terminal/Tank Farm Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Flange
- If Pipe, specify:	

3a. Nominal diameter of pipe (in):	
3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	2009
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	.36
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect"	

determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 50
8c. Estimated cost of Operator's property damage & repairs	$ 25,000
8d. Estimated cost of Operator's emergency response	$ 0
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 19,950
Describe:	water and soil analysis and disposal
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 45,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	50.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	

- If Yes, Which operational factors complicate execution? (*select all that apply*)	
- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room was not the cause of or a contributing factor.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G8 - Other Incident Cause

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	Unknown
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	Still under investigation, cause of Accident to be determined* (*Supplemental Report required)

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 11:15 A.M. CST on November 8, 2010, an operator found a rainbow discoloration on standing water around the Line 1 Cedar Bayou injection\delivery valve and a sheen in an access well. The operations manager was notified at 11:30 A.M. and he notified the director of operations at 11: 50 A.M. Contractors arrived at approximately 1:30 P.M. and began excavating around the valve and collecting the pooled water. The following day the insulating joint was identified as the source of the release and was repaired on November 12th. During the excavation process, approximately 43.3 cubic yards of soil were removed to determine the source of the release and establish a suitable area to complete the repair. Approximately 226.7 bbls of water and 15 gallons of product were recovered and 5 gallons of product were calculated to have evaporated. The laboratory analysis of the contaminated soil had not been received at the time of this report so the total volume released and recovered will be submitted on the final report. The event did not meet state reporting requirements.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622465
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	12/06/2010

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	12/06/2010
	No.	20100276 - 15570 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	02/07/2011		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	11/08/2010 11:15		
5. Location of Accident:			
Latitude:	29.85836		
Longitude:	-94.97929		
6. National Response Center Report Number (if applicable):	964186		
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):			
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Gasoline (non-Ethanol)		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	.48		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	.36		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77532
4. City	Crosby
5. County or Parish	
6. Operator-designated location:	Milepost/Valve Station
Specify:	Cedar Bayou
7. Pipeline/Facility name:	Colonial
8. Segment name/ID:	Line 1
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Originated on Operator-controlled property, but then flowed or migrated off the property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Flange
- If Pipe, specify:	

3a. Nominal diameter of pipe (in):	
3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	2009
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	gasket
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	.36
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect"	

determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 45
8c. Estimated cost of Operator's property damage & repairs	$ 49,955
8d. Estimated cost of Operator's emergency response	$ 0
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 30,000
Describe:	water and soil analysis and disposal
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 80,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	50.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	

- If Yes, Which operational factors complicate execution? (*select all that apply*)	
- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues was not the cause of or a contributing factor.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	Gasket
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	Yes
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 11:15 A.M. CST on November 8, 2010, an operator found a rainbow discoloration on standing water around the Line 1 Cedar Bayou injection\delivery valve and a sheen in an access well. The operations manager was notified at 11:30 A.M. and he notified the director of operations at 11: 50 A.M. Contractors arrived at approximately 1:30 P.M. and began excavating around the valve and collecting the pooled water. The following day the insulating joint was identified as the source of the release and was repaired on November 12th. During the excavation process, approximately 52.5 cubic yards of soil were removed to determine the source of the release and establish a suitable area to complete the repair. Approximately 226.7 bbls of water and 15 gallons of product were recovered and 4.2 gallons of product were calculated to have evaporated and 0.21 gallons in the contaminated soil. The accident did not meet state reporting requirements. A National Response Center notification was made on 1-10-2011 when it was determined that the estimated total costs would exceed $50,000.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	
Preparer's Telephone Number	
Preparer's E-mail Address	
Preparer's Facsimile Number	
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	
Date	02/07/2011

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	12/06/2010
	No.	20100276 - 15665 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	03/07/2011		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	11/08/2010 11:15		
5. Location of Accident:			
Latitude:	29.85836		
Longitude:	-94.97929		
6. National Response Center Report Number (if applicable):	964186		
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):			
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Gasoline (non-Ethanol)		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	.48		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	.36		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	No
- If No, Explain:	The line section was not active at the time of the leak.
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77532
4. City	Crosby
5. County or Parish	
6. Operator-designated location:	Milepost/Valve Station
Specify:	Cedar Bayou
7. Pipeline/Facility name:	Colonial
8. Segment name/ID:	Line 1
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Originated on Operator-controlled property, but then flowed or migrated off the property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Flange
- If Pipe, specify:	

3a. Nominal diameter of pipe (in):	
3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	2009
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	gasket
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	.36
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect"	

determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 45
8c. Estimated cost of Operator's property damage & repairs	$ 49,955
8d. Estimated cost of Operator's emergency response	$ 0
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 30,000
Describe:	water and soil analysis and disposal
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 80,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	50.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	

- If Yes, Which operational factors complicate execution? (*select all that apply*)	
- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues was not the cause of or a contributing factor.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	Gasket
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	Yes
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 11:15 A.M. CST on November 8, 2010, an operator found a rainbow discoloration on standing water around the Line 1 Cedar Bayou injection\delivery valve and a sheen in an access well. The operations manager was notified at 11:30 A.M. and he notified the director of operations at 11: 50 A.M. Contractors arrived at approximately 1:30 P.M. and began excavating around the valve and collecting the pooled water. The following day the insulating joint was identified as the source of the release and was repaired on November 12th. During the excavation process, approximately 52.5 cubic yards of soil were removed to determine the source of the release and establish a suitable area to complete the repair. Approximately 226.7 bbls of water and 15 gallons of product were recovered and 4.2 gallons of product were calculated to have evaporated and 0.21 gallons in the contaminated soil. The accident did not meet state reporting requirements. A National Response Center notification was made on 1-10-2011 when it was determined that the estimated total costs would exceed $50,000.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622465
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	03/07/2011

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	12/06/2010
	No.	20100276 - 18419 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	08/06/2013		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	11/08/2010 11:15		
5. Location of Accident:			
Latitude:	29.85836		
Longitude:	-94.97929		
6. National Response Center Report Number (if applicable):	964186		
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):			
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Gasoline (non-Ethanol)		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	.48		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	.36		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	No
- If No, Explain:	The line section was not active at the time of the leak.
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Texas
3. Zip Code:	77532
4. City	Crosby
5. County or Parish	
6. Operator-designated location:	Milepost/Valve Station
Specify:	Cedar Bayou
7. Pipeline/Facility name:	Colonial
8. Segment name/ID:	Line 1
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Originated on Operator-controlled property, but then flowed or migrated off the property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pump/Meter Station Equipment and Piping
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Flange
- If Pipe, specify:	

3a. Nominal diameter of pipe (in):	
3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	2009
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	gasket
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	.36
5c. Name of body of water, if commonly known:	none
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect"	

determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 45
8c. Estimated cost of Operator's property damage & repairs	$ 49,955
8d. Estimated cost of Operator's emergency response	$ 0
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 30,000
Describe:	water and soil analysis and disposal
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 80,000

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	50.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	No
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	

- If Yes, Which operational factors complicate execution? (*select all that apply*)	
- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues was not the cause of or a contributing factor.
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	Gasket
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	Yes
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

At approximately 11:15 A.M. CST on November 8, 2010, an operator found a rainbow discoloration on standing water around the Line 1 Cedar Bayou injection\delivery valve and a sheen in an access well. The operations manager was notified at 11:30 A.M. and he notified the director of operations at 11: 50 A.M. Contractors arrived at approximately 1:30 P.M. and began excavating around the valve and collecting the pooled water. The following day the insulating joint was identified as the source of the release and was repaired on November 12th. During the excavation process, approximately 52.5 cubic yards of soil were removed to determine the source of the release and establish a suitable area to complete the repair. Approximately 226.7 bbls of water and 15 gallons of product were recovered and 4.2 gallons of product were calculated to have evaporated and 0.21 gallons in the contaminated soil. The accident did not meet state reporting requirements. A National Response Center notification was made on 1-10-2011 when it was determined that the estimated total costs would exceed $50,000.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M.Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622465
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	08/06/2013

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	10/26/2012
	No.	20120311 - 16987 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
	Yes		

Last Revision Date:	
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	10/03/2012 14:40
5. Location of Accident:	
Latitude:	35.05097
Longitude:	-85.33488
6. National Response Center Report Number (if applicable):	1026365
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	10/03/2012 16:47
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Gasoline (non-Ethanol)
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	85.71
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	23.81
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	10/03/2012 15:19
14b. Local time pipeline/facility restarted:	10/05/2012 12:00
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	
18b. Local time Operator resources arrived on site:	

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Tennessee
3. Zip Code:	37405
4. City	Chattanooga
5. County or Parish	Hamilton
6. Operator-designated location:	Survey Station No.
Specify:	37250
7. Pipeline/Facility name:	Colonial/Line 19
8. Segment name/ID:	Atlanta to Nashville/Line 19
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pipeline, Including Valve Sites
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe
- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	12.75

3b. Wall thickness (in):	.250
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	52,000
3d. Pipe specification:	API 5L
3e. Pipe Seam , specify:	Longitudinal ERW - High Frequency
- If Other, Describe:	
3f. Pipe manufacturer:	American Steel Pipe
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	Coal Tar
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1972
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Crack
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	Yes
- Groundwater	Yes
- Soil	Yes
- Vegetation	Yes
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	Yes
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	71.43
5c. Name of body of water, if commonly known:	None
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	Yes

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 10,800
8c. Estimated cost of Operator's property damage & repairs	$ 150,000
8d. Estimated cost of Operator's emergency response	$ 300,000
8e. Estimated cost of Operator's environmental remediation	$ 300,000
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 760,800

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	591.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	900.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	Manual
5b. Type of downstream valve used to initially isolate release source:	Remotely Controlled
5c. Length of segment isolated between valves (ft):	10,326
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Notification From Public
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues were not the cause of or a contributing factor to the accident
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
1a. Specify how many were tested:	2
1b. Specify how many failed:	0
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Previous Damage due to Excavation Activity
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	Yes
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	Yes
Most recent year conducted:	2011
- Ultrasonic	
Most recent year conducted:	
- Geometry	Yes
Most recent year conducted:	2011
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	Yes
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	No
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	No
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	No

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	No
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	Yes
- If "Private", Specify:	Private Business
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Unknown/Other
10. Type of excavation equipment:	Unknown/Other
11. Type of work performed:	Unknown/Other
12. Was the One-Call Center notified?	No
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	Unknown/Other
14. Were facility locate marks visible in the area of excavation?	Unknown/Other
15. Were facilities marked correctly?	Unknown/Other
16. Did the damage cause an interruption in service?	Yes
16a. If Yes, specify duration of the interruption (hours)	45
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	Data Not Collected
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On October 3, at 1440 EST, a landowner called into the Chattanooga office and reported a strong petroleum odor near Colonial's line 19. Colonial employees responded, arrived onsite at 1500 and discovered dead vegetation, a petroleum odor, and a film of product on a small ditch adjacent to the right of way. The employee called 911 and the control room to report the confirmed leak. Line 19 was shutdown at 1519 EST. The line segment was isolated and emergency response resources (internal and contract) were contacted and deployed to the site. Appropriate agency notifications were made (NRC at 16:47, TEMA at 15:30 by Hamilton County EMS, and TDEC at 16:30). Hamilton County Emergency Management Services and the Chattanooga Fire Department arrived on site around 15:25. Local emergency management and Colonial contracted resources began deploying boom to contain the released product. The pipeline was excavated on 10/4/2012 and field observations indicated mechanical damage causing an area of dents with gouges in the vicinity of the 3 o'clock position of the pipeline. A crack measuring 3.822" length was present in one of the gouges. The specific cause of the damage is currently under investigation. The damage was repaired with a 10 foot length sleeve during the early morning hours of 10/5/2012. Line 19 was restarted 10/5/12 at 1200 EST. The duration of the release from the pipeline is unknown at this time. Gasoline released from the pipeline traveled through subsurface soils to a small ditch. Product flowed within the small ditch approximately 600 feet to a marsh located on an adjacent property. Emergency responders stopped the flow of product offsite with boom and by blocking off a culvert within the ditch. Downstream of the culvert in the marsh, released product was contained with boom. A series of underflow dams were constructed along a small stream that connected the marsh to the Tennessee River, preventing product from reaching the river. Assessment activities are underway to define impacts to soil, groundwater, and surface water. Interim remedial activities are underway to excavate impacted soils at the leaksite. TDEC is providing oversight of cleanup actitivies. As of 10/17/2012 approximately 1000 gallons of gasoline have been recovered from the impacted ditch, marsh, and leak site excavation area. In an effort to quantify the total release volume, the amount of product lost to evaporation and impacted soils are currently under evaluation. Preliminary estimates of evaporative losses are 1000 gallons and the amount contained in soils are estimated at 1600 gallons. At this time the total release volume is estimated at 3600 gallons.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M. Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622315
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	10/26/2012

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.	OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020

U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	10/26/2012
	No.	20120311 - 17642 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	

Last Revision Date:	03/21/2013
1. Operator's OPS-issued Operator Identification Number (OPID):	2552
2. Name of Operator	COLONIAL PIPELINE CO
3. Address of Operator:	
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100
3b. City	ALPHARETTA
3c. State	Georgia
3d. Zip Code	30009-4765
4. Local time *(24-hr clock)* and date of the Accident:	10/03/2012 14:40
5. Location of Accident:	
Latitude:	35.05097
Longitude:	-85.33488
6. National Response Center Report Number (if applicable):	1026365
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	10/03/2012 16:47
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions
- Specify Commodity Subtype:	Gasoline (non-Ethanol)
- If "Other" Subtype, Describe:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:	
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100	
9. Estimated volume of commodity released unintentionally (Barrels):	85.70
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
11. Estimated volume of commodity recovered (Barrels):	23.80
12. Were there fatalities?	No
- If Yes, specify the number in each category:	
12a. Operator employees	
12b. Contractor employees working for the Operator	
12c. Non-Operator emergency responders	
12d. Workers working on the right-of-way, but NOT associated with this Operator	
12e. General public	
12f. Total fatalities (sum of above)	
13. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
13a. Operator employees	
13b. Contractor employees working for the Operator	
13c. Non-Operator emergency responders	
13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	10/03/2012 15:19
14b. Local time pipeline/facility restarted:	10/05/2012 12:00
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	10/03/2012 15:00
18b. Local time Operator resources arrived on site:	10/03/2012 15:00

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Tennessee
3. Zip Code:	37405
4. City	Chattanooga
5. County or Parish	Hamilton
6. Operator-designated location:	Survey Station No.
Specify:	37250
7. Pipeline/Facility name:	Colonial/Line 19
8. Segment name/ID:	Atlanta to Nashville/Line 19
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	168
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pipeline, Including Valve Sites
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe
- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	12.75

3b. Wall thickness (in):	.250
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	52,000
3d. Pipe specification:	API 5L
3e. Pipe Seam , specify:	Longitudinal ERW - High Frequency
- If Other, Describe:	
3f. Pipe manufacturer:	American Steel Pipe
3g. Year of manufacture:	1972
3h. Pipeline coating type at point of Accident, specify:	Coal Tar
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1972
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Crack
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	Yes
- Groundwater	Yes
- Soil	Yes
- Vegetation	Yes
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	Yes
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	71.40
5c. Name of body of water, if commonly known:	None
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	Yes

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 10,800
8c. Estimated cost of Operator's property damage & repairs	$ 300,000
8d. Estimated cost of Operator's emergency response	$ 400,000
8e. Estimated cost of Operator's environmental remediation	$ 500,000
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 1,210,800

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	591.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	900.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	Manual
5b. Type of downstream valve used to initially isolate release source:	Remotely Controlled
5c. Length of segment isolated between valves (ft):	10,326
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Notification From Public
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues were not the cause of or a contributing factor to the accident
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
1a. Specify how many were tested:	2
1b. Specify how many failed:	0
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Previous Damage due to Excavation Activity
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	Yes
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	Yes
Most recent year conducted:	2011
- Ultrasonic	
Most recent year conducted:	
- Geometry	Yes
Most recent year conducted:	2011
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	Yes
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	No
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	No
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	No

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	No
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	Yes
- If "Private", Specify:	Private Business
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Unknown/Other
10. Type of excavation equipment:	Unknown/Other
11. Type of work performed:	Unknown/Other
12. Was the One-Call Center notified?	No
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	Unknown/Other
14. Were facility locate marks visible in the area of excavation?	Unknown/Other
15. Were facilities marked correctly?	Unknown/Other
16. Did the damage cause an interruption in service?	Yes
16a. If Yes, specify duration of the interruption (hours)	45
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	Data Not Collected
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On October 3, at 1440 EST, a landowner called into the Chattanooga office and reported a strong petroleum odor near Colonial's line 19. Colonial employees responded, arrived onsite at 1500 and discovered dead vegetation, a petroleum odor, and a film of product on a small ditch adjacent to the right of way. The employee called 911 and the control room to report the confirmed leak. Line 19 was shutdown at 1519 EST. The line segment was isolated and emergency response resources (internal and contract) were contacted and deployed to the site. Appropriate agency notifications were made (NRC at 16:47, TEMA at 15:30 by Hamilton County EMS, and TDEC at 16:30). Hamilton County Emergency Management Services and the Chattanooga Fire Department arrived on site around 15:25. Local emergency management and Colonial contracted resources began deploying boom to contain the released product. The pipeline was excavated on 10/4/2012 and field observations indicated mechanical damage causing an area of dents with gouges in the vicinity of the 3 o'clock position of the pipeline. A crack measuring 3.822" length was present in one of the gouges. The specific cause of the damage is currently under investigation. The damage was repaired with a 10 foot length sleeve during the early morning hours of 10/5/2012. Line 19 was restarted 10/5/12 at 1200 EST. The duration of the release from the pipeline is unknown at this time. Gasoline released from the pipeline traveled through subsurface soils to a small ditch. Product flowed within the small ditch approximately 600 feet to a marsh located on an adjacent property. Emergency responders stopped the flow of product offsite with boom and by blocking off a culvert within the ditch. Downstream of the culvert in the marsh, released product was contained with boom. A series of underflow dams were constructed along a small stream that connected the marsh to the Tennessee River, preventing product from reaching the river. Assessment activities are underway to define impacts to soil, groundwater, and surface water. Interim remedial activities are underway to excavate impacted soils at the leaksite. TDEC is providing oversight of cleanup actitivies. As of 10/17/2012 approximately 1000 gallons of gasoline have been recovered from the impacted ditch, marsh, and leak site excavation area. In an effort to quantify the total release volume, the amount of product lost to evaporation and impacted soils are currently under evaluation. Preliminary estimates of evaporative losses are 1000 gallons and the amount contained in soils are estimated at 1600 gallons. At this time the total release volume is estimated at 3600 gallons.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M. Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622315
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	03/21/2013

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	10/26/2012
	No.	20120311 - 18114 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	
Last Revision Date:	05/28/2013		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	10/03/2012 14:40		
5. Location of Accident:			
Latitude:	35.05097		
Longitude:	-85.33488		
6. National Response Center Report Number (if applicable):	1026365		
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	10/03/2012 16:47		
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Gasoline (non-Ethanol)		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	85.70		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	23.80		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	10/03/2012 15:19
14b. Local time pipeline/facility restarted:	10/05/2012 12:00
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	10/03/2012 15:00
18b. Local time Operator resources arrived on site:	10/03/2012 15:00

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Tennessee
3. Zip Code:	37405
4. City	Chattanooga
5. County or Parish	Hamilton
6. Operator-designated location:	Survey Station No.
Specify:	37250
7. Pipeline/Facility name:	Colonial/Line 19
8. Segment name/ID:	Atlanta to Nashville/Line 19
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	168
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pipeline, Including Valve Sites
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe
- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	12.75

3b. Wall thickness (in):	.250
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	52,000
3d. Pipe specification:	API 5L
3e. Pipe Seam , specify:	Longitudinal ERW - High Frequency
- If Other, Describe:	
3f. Pipe manufacturer:	American Steel Pipe
3g. Year of manufacture:	1972
3h. Pipeline coating type at point of Accident, specify:	Coal Tar
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1972
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Crack
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	Yes
- Groundwater	Yes
- Soil	Yes
- Vegetation	Yes
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	Yes
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	71.40
5c. Name of body of water, if commonly known:	None
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	Yes

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 10,800
8c. Estimated cost of Operator's property damage & repairs	$ 300,000
8d. Estimated cost of Operator's emergency response	$ 400,000
8e. Estimated cost of Operator's environmental remediation	$ 500,000
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 1,210,800

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	591.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	900.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	Manual
5b. Type of downstream valve used to initially isolate release source:	Remotely Controlled
5c. Length of segment isolated between valves (ft):	10,326
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Notification From Public
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues were not the cause of or a contributing factor to the accident
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
1a. Specify how many were tested:	2
1b. Specify how many failed:	0
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage
G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	

- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	

G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Previous Damage due to Excavation Activity
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	Yes
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	Yes
Most recent year conducted:	2011
- Ultrasonic	
Most recent year conducted:	
- Geometry	Yes
Most recent year conducted:	2011
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	Yes
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	No
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	No
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	No

5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	No
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	Yes
- If "Private", Specify:	Private Business
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Unknown/Other
10. Type of excavation equipment:	Unknown/Other
11. Type of work performed:	Unknown/Other
12. Was the One-Call Center notified?	No
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	Unknown/Other
14. Were facility locate marks visible in the area of excavation?	Unknown/Other
15. Were facilities marked correctly?	Unknown/Other
16. Did the damage cause an interruption in service?	Yes
16a. If Yes, specify duration of the interruption (hours)	45
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	Data Not Collected
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	

- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	

- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	

- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	

- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On October 3, at 1440 EST, a landowner called into the Chattanooga office and reported a strong petroleum odor near Colonial's line 19. Colonial employees responded, arrived onsite at 1500 and discovered dead vegetation, a petroleum odor, and a film of product on a small ditch adjacent to the right of way. The employee called 911 and the control room to report the confirmed leak. Line 19 was shutdown at 1519 EST. The line segment was isolated and emergency response resources (internal and contract) were contacted and deployed to the site. Appropriate agency notifications were made (NRC at 16:47, TEMA at 15:30 by Hamilton County EMS, and TDEC at 16:30). Hamilton County Emergency Management Services and the Chattanooga Fire Department arrived on site around 15:25. Local emergency management and Colonial contracted resources began deploying boom to contain the released product. The pipeline was excavated on 10/4/2012 and field observations indicated mechanical damage causing an area of dents with gouges in the vicinity of the 3 o'clock position of the pipeline. A crack measuring 3.822" length was present in one of the gouges. The specific cause of the damage is currently under investigation. The damage was repaired with a 10 foot length sleeve during the early morning hours of 10/5/2012. Line 19 was restarted 10/5/12 at 1200 EST. The duration of the release from the pipeline is unknown at this time. Gasoline released from the pipeline traveled through subsurface soils to a small ditch. Product flowed within the small ditch approximately 600 feet to a marsh located on an adjacent property. Emergency responders stopped the flow of product offsite with boom and by blocking off a culvert within the ditch. Downstream of the culvert in the marsh, released product was contained with boom. A series of underflow dams were constructed along a small stream that connected the marsh to the Tennessee River, preventing product from reaching the river. Assessment activities are underway to define impacts to soil, groundwater, and surface water. Interim remedial activities are underway to excavate impacted soils at the leaksite. TDEC is providing oversight of cleanup actitivies. As of 10/17/2012 approximately 1000 gallons of gasoline have been recovered from the impacted ditch, marsh, and leak site excavation area. In an effort to quantify the total release volume, the amount of product lost to evaporation and impacted soils are currently under evaluation. Preliminary estimates of evaporative losses are 1000 gallons and the amount contained in soils are estimated at 1600 gallons. At this time the total release volume is estimated at 3600 gallons.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	A. M. Taylor
Preparer's Title	Regulatory Manager
Preparer's Telephone Number	6787622872
Preparer's E-mail Address	ataylor@colpipe.com
Preparer's Facsimile Number	6787622315
Authorized Signer Name	A. M. Taylor
Authorized Signer Title	Regulatory Manager
Authorized Signer Telephone Number	6787622872
Authorized Signer Email	ataylor@colpipe.com
Date	05/28/2013

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 8/31/2020
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	10/26/2012
	No.	20120311 - 20151 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	02/20/2015		
1. Operator's OPS-issued Operator Identification Number (OPID):	2552		
2. Name of Operator	COLONIAL PIPELINE CO		
3. Address of Operator:			
3a. Street Address	1185 SANCTUARY PARKWAY, SUITE 100		
3b. City	ALPHARETTA		
3c. State	Georgia		
3d. Zip Code	30009-4765		
4. Local time *(24-hr clock)* and date of the Accident:	10/03/2012 14:40		
5. Location of Accident:			
Latitude:	35.05097		
Longitude:	-85.33488		
6. National Response Center Report Number (if applicable):	1026365		
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	10/03/2012 16:47		
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Gasoline (non-Ethanol)		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend e.g. B2, B20, B100			
9. Estimated volume of commodity released unintentionally (Barrels):	85.70		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	61.90		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			

13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	Yes
- If No, Explain:	
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	10/03/2012 15:19
14b. Local time pipeline/facility restarted:	10/05/2012 12:00
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	0
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident - effective 7- 2014 changed to "Local time Operator identified failure":	10/03/2012 15:00
18b. Local time Operator resources arrived on site:	10/03/2012 15:00

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	Tennessee
3. Zip Code:	37405
4. City	Chattanooga
5. County or Parish	Hamilton
6. Operator-designated location:	Survey Station No.
Specify:	37250
7. Pipeline/Facility name:	Colonial/Line 19
8. Segment name/ID:	Atlanta to Nashville/Line 19
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	168
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Interstate
2. Part of system involved in Accident:	Onshore Pipeline, Including Valve Sites
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe
- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	12.75

3b. Wall thickness (in):	.250
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	52,000
3d. Pipe specification:	API 5L
3e. Pipe Seam , specify:	Longitudinal ERW - High Frequency
- If Other, Describe:	
3f. Pipe manufacturer:	American Steel Pipe
3g. Year of manufacture:	1972
3h. Pipeline coating type at point of Accident, specify:	Coal Tar
- If Other, Describe:	
- If Weld, including heat-affected zone, specify. If Pipe Girth Weld, 3a through 3h above are required:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1972
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Crack
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION

1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	Yes
- Groundwater	Yes
- Soil	Yes
- Vegetation	Yes
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	Yes
- Drinking water: *(Select one or both)*	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	71.40
5c. Name of body of water, if commonly known:	None
6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's	Yes

Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	$ 0
8b. Estimated cost of commodity lost	$ 10,800
8c. Estimated cost of Operator's property damage & repairs	$ 350,000
8d. Estimated cost of Operator's emergency response	$ 375,000
8e. Estimated cost of Operator's environmental remediation	$ 550,000
8f. Estimated other costs	$ 0
Describe:	
8g. Estimated total costs (sum of above) – effective 12-2012, changed to "Total estimated property damage (sum of above)"	$ 1,285,800

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	591.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	900.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (*Complete 5a. – 5f below)* effective 12-2012, changed to *"(Complete 5.a – 5.e below)"*	
5a. Type of upstream valve used to initially isolate release source:	Manual
5b. Type of downstream valve used to initially isolate release source:	Remotely Controlled
5c. Length of segment isolated between valves (ft):	10,326
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, Which operational factors complicate execution? (*select all that apply*)	

- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
7c. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	
7d. Did CPM leak detection system information (such as alarm (s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	
8. How was the Accident initially identified for the Operator?	Notification From Public
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify:	
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The controller or control room issues were not the cause of or a contributing factor to the accident
- If Yes, specify investigation result(s): *(select all that apply)*	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	

1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	

PART G – APPARENT CAUSE

Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).

Apparent Cause:	G3 - Excavation Damage

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

Corrosion Failure – Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial	
Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
If Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	Previous Damage due to Excavation Activity
- If Previous Damage due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	Yes
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	Yes
Most recent year conducted:	2011
- Ultrasonic	
Most recent year conducted:	
- Geometry	Yes
Most recent year conducted:	2011
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	Yes
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	No
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	No
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	No
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	

- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	No
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	Yes
- If "Private", Specify:	Private Business
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	Unknown/Other
10. Type of excavation equipment:	Unknown/Other
11. Type of work performed:	Unknown/Other
12. Was the One-Call Center notified?	No
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	Unknown/Other
14. Were facility locate marks visible in the area of excavation?	Unknown/Other
15. Were facilities marked correctly?	Unknown/Other
16. Did the damage cause an interruption in service?	Yes
16a. If Yes, specify duration of the interruption (hours)	45
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	Data Not Collected
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage *- only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of	

the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one **sub-cause** can be selected from the shaded left-hand column	
Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause shown above is based on the following: *(select all that apply)*	
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)	

- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: *(select all that apply)*	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
5. Has one or more internal inspection tool collected data at the point of the Accident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year run:	
- Ultrasonic	
Most recent year run:	
- Geometry	
Most recent year run:	
- Caliper	
Most recent year run:	
- Crack	
Most recent year run:	
- Hard Spot	
Most recent year run:	
- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	

- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(select all that apply)* -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- ESD System Failure	
- Other	
- If Other – Describe:	
- If Pump or Pump-related Equipment:	
2. Specify:	
- If Other – Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other – Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation	

2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	

G8 - Other Accident Cause - only one **sub-cause** can be selected from the shaded left-hand column

Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On October 3, at 1440 EST, a landowner called into the Chattanooga office and reported a strong petroleum odor near Colonial's line 19. Colonial employees responded, arrived onsite at 1500 and discovered dead vegetation, a petroleum odor, and a film of product on a small ditch adjacent to the right of way. The employee called 911 and the control room to report the confirmed leak. Line 19 was shutdown at 1519 EST. The line segment was isolated and emergency response resources (internal and contract) were contacted and deployed to the site. Appropriate agency notifications were made (NRC at 16:47, TEMA at 15:30 by Hamilton County EMS, and TDEC at 16:30). Hamilton County Emergency Management Services and the Chattanooga Fire Department arrived on site around 15:25. Local emergency management and Colonial contracted resources began deploying boom to contain the released product. The pipeline was excavated on 10/4/2012 and field observations indicated mechanical damage causing an area of dents with gouges in the vicinity of the 3 o'clock position of the pipeline. A crack measuring 3.822" length was present in one of the gouges. The specific cause of the damage is currently under investigation. The damage was repaired with a 10 foot length sleeve during the early morning hours of 10/5/2012. Line 19 was restarted 10/5/12 at 1200 EST. The duration of the release from the pipeline is unknown at this time. Gasoline released from the pipeline traveled through subsurface soils to a small ditch. Product flowed within the small ditch approximately 600 feet to a marsh located on an adjacent property. Emergency responders stopped the flow of product offsite with boom and by blocking off a culvert within the ditch. Downstream of the culvert in the marsh, released product was contained with boom. A series of underflow dams were constructed along a small stream that connected the marsh to the Tennessee River, preventing product from reaching the river. Assessment activities are underway to define impacts to soil, groundwater, and surface water. Interim remedial activities are underway to excavate impacted soils at the leaksite. TDEC is providing oversight of cleanup actitivies. As of 10/17/2012 approximately 1000 gallons of gasoline have been recovered from the impacted ditch, marsh, and leak site excavation area. In an effort to quantify the total release volume, the amount of product lost to evaporation and impacted soils are currently under evaluation. Preliminary estimates of evaporative losses are 1000 gallons and the amount contained in soils are estimated at 1600 gallons. At this time the total release volume is estimated at 3600 gallons.

2/10/2015 Update: Tennessee Department of Environment and Conservation (TDEC) approved and landowner agreed for on-site disposal of excavated soils. Estimated costs have been finalized. Expect to move soils to final disposal and site closure in the first quarter of 2015.

PART I - PREPARER AND AUTHORIZED SIGNATURE

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