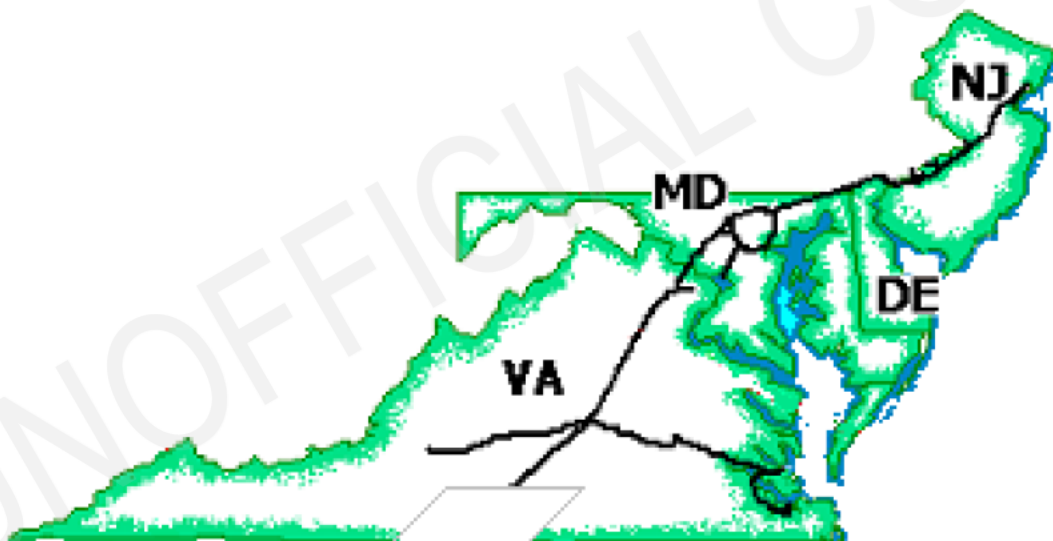




**Colonial Pipeline Company**  
**Emergency Response Plans**

## **Northeast Response Zone**





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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

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



# Colonial Pipeline Company

## NORTHEAST RESPONSE ZONE

### INFORMATION SUMMARY

Name and address of Operator:

**Colonial Pipeline Company**  
**P. O. Box 1624**  
**Alpharetta, GA 30004-4738**

### SIGNIFICANT & SUBSTANTIAL HARM

The volume of petroleum products transported by the Colonial Pipeline system (and on 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 3 response zones for its pipeline system. Currently, these response zones correspond with the 3 operating areas of the 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

#### Northeast District:

Gerald A. Beck  
 1089 Kings Highway  
 West Deptford, NJ 08086

Office Phone: 443-504-4339

Cell Phone: (b) (6)

Home: (b) (6)

#### Alternate:

Darren J Pruitt  
 411 Gallimore Dairy Road  
 Greensboro, NC 27409

Office Phone: 336-931-6025

Cell Phone: (b) (6)

Home: (b) (6)

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) (7)(F), (b) (3)



# Colonial Pipeline Company

## Northeast Response Zone

### PHMSA Response Zone 803

#### Colonial Response Zone: Northeast

#### Virginia Counties

Appomattox  
Bedford  
Buckingham  
Campbell  
Charles City  
Charlotte  
Chesapeake  
Chesterfield  
Culpeper  
Cumberland  
Fairfax  
Fairfax City  
Fauquier  
Fluvanna  
Henrico  
Isle of Wight  
James City  
Louisa  
Lynchburg  
Newport News  
Orange  
Portsmouth  
Powhatan  
Prince Edward  
Prince William  
Richmond City  
Suffolk  
Surry  
York

#### Maryland Counties

Anne Arundel

Baltimore  
Baltimore City  
Carroll  
Cecil  
Harford  
Howard  
Montgomery  
Prince Georges

#### District of Columbia

#### Pennsylvania Counties

Chester  
Delaware  
Philadelphia

#### Delaware Counties

New Castle

#### New Jersey Counties

Gloucester  
Camden  
Burlington  
Mercer  
Middlesex  
Union  
Essex

#### New York Counties

Richmond



## RESPONSE ZONE 803 - NORTH EAST DISTRICT

Coverage:  
Hancock Station to Linden

Norfolk, Roanoke,  
Fairfax, Dulles, N. Baltimore,  
S. Baltimore, Dorsey,  
Woodbury, Trenton, &  
Pennsauken Stublines



RZ803A.pdf

Line Name	Line No.	Dia.	Miles
-----------	----------	------	-------

Hancock Station to Dorsey	3	36"	189.3
	4	32"	189.3
Dorsey to Linden	3	30"	195.3
	3S	30"	1.4
Mitchell to Roanoke	25	8"/12"	88.1
Mitchell to Norfolk	26	12"	7.2
	27	14"/16"	169.7
Fairfax Stublines	28A	22"	8.9
	28B	6"	16.9
	30	20"	2.0
Baltimore Stublines	31	12"	33.9
	32	12"	31.6
	34	6"	28.4
	36	8"	23.9
Woodbury Stublines	37	8"	0.0
	39	10"	6.9
	45	10"	4
Pennsauken to Pennsauken	41	8"	10.3
Allentown to Trenton	42	10"	5
Stand-By Lines			
	25S	8"	43
	33A	6"	7.2
	33S	6"	16.3
	35S	6"	34.5
	39S	10"	1.1



**COLONIAL PIPELINE SYSTEM MAP**  
Response Zone 803 - Northeast District

**New York**

**Pennsylvania**

**New Jersey**

**Delaware**

**Maryland**

**Virginia**

**North Carolina**

**NED**  
**SED**

**See Map RZ803C**

**Scale:** 0 20 40 60 80 100 120 140 160 Miles

**Key Stations and Junctions:**

- Newark Junction
- Linden Junction
- Trenton DE
- Allentown Station
- Pennsauken Junction
- Eagle Point DE
- Woodbury DE
- Landenberg Station
- Booth DE
- Conowingon Station
- Aberdeen
- Bel Air Station
- Reistertown Station
- Dorsey Junction
- Gaithersburg Station
- Dulles DE
- Bull Run DE
- Chantilly Station
- Remington Station
- Locust Grove Station
- Louisa Station
- James River Station
- Mitchell Junction
- Buckingham Junction
- Lynchburg Station
- Forest Junction
- Roanoke DE
- Hancock Station
- Hickory Grove Station
- Wt Station
- Reidsville Station
- Greensboro Junction
- Lexington Station
- Kannapolis Station
- Charlotte DE
- Gastonia Station
- Charlotte-Douglas Int. Airport
- Simpsonville Station
- Due West Junction
- Fayetteville DE

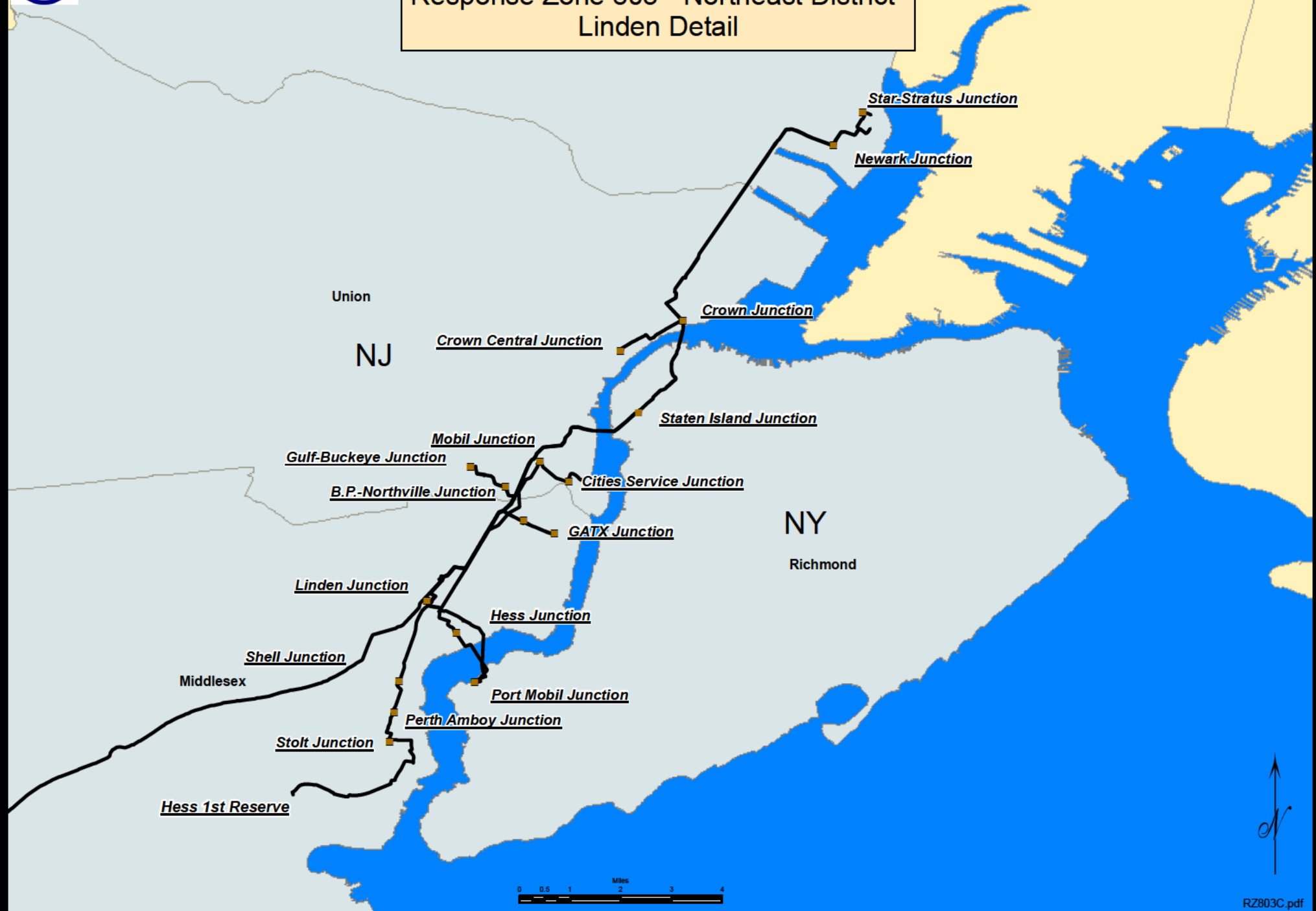
**Other Labels:**

- Essex
- Essex Junction
- Staten Island Junction
- Mercer
- Phila
- Philadelphia
- Camden
- Delaware
- Gloucester
- Booth DE
- North Baltimore DE
- South Baltimore DE
- B.W. DE
- Currys Bay DE
- Washington DE
- Prince Georges
- Culpeper
- Orange
- Louis
- Fluvanna
- Richmond DE
- Richmond City
- Powhatan Station
- Willis Mtn Station
- West Branch DE
- Yorktown DE
- Crane Island DE
- Hill DE
- Norfolk DE
- Alamance
- Liberty Station
- Raleigh-Durham DE
- Apex DE
- Johnston
- Lillington Station
- Halifax
- Cumberland
- Greenville
- Spartanburg DE
- Gaffney Station
- York
- Laurens
- Abbeville
- Greenwood





COLONIAL PIPELINE SYSTEM MAP  
Response Zone 803 - Northeast District  
Linden Detail





# 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*

Gerald A. Beck  
Director of Operations


Phone: 443-504-4339  
Fax: 856-384-5739

**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 discharges.

Colonial Pipeline Company

Date: 7/21/10

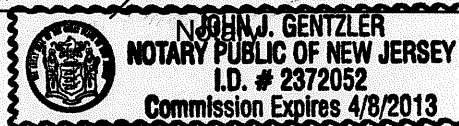
  
Gerald A. Beck  
Director of Operations

This Certification of Response Preparedness was acknowledged before me by Gerald A. Beck on behalf of said corporation.

7/21/10

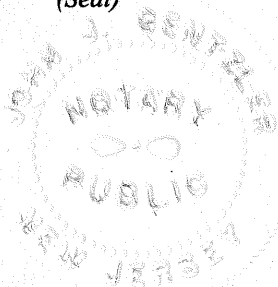
Date





My Commission Expires

(Seal)





# Colonial Pipeline Company

## WORST CASE DISCHARGE

### NORTHEAST RESPONSE ZONE

#### RSPA Response Zone 803

#### Overview

This section presents the Worst Case Discharge (WCD) for Colonial's Northeast 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 Northeast 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
(b) (7)(F), (b) (3)				

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%
<b>Total claimed credit</b>		<b>70%</b>



# Colonial Pipeline Company

## WORST CASE DISCHARGE

### Worst Case Discharge – Pipeline

#### Location

STATE:  
COUNTY  
LINE NUMBER:  
LOCATIONS NUMBER:  
ALIGNMENT MAP NUMBER:  
USGS MAP NUMBER:  
UPSTREAM ISOLATION LOCATION:  
LEAK STATION NUMBER:  
DOWNSTREAM ISOLATION LOCATION:

Virginia

(b) (7)(F), (b) (3)

APPROXIMATE PHYSICAL LOCATION: (b) (7)(F), (b) (3)

#### Construction / Operating Parameters

PIPE DIAMETER:	36 in
WALL THICKNESS:	0.312 in
MAXIMUM FLOW RATE:	42,000 bbl/hr
VOLUME/FOOT:	1.218 bbl/ft
CONTRIBUTING FOOTAGE:	20,516 ft

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.



## Colonial Pipeline Company

### WORST CASE DISCHARGE

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

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:

(b) (7)(F), (b) (3)

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

(b) (7)(F), (b) (3)

Therefore:

(b) (7)(F), (b) (3)

Based on these calculations, the maximum calculated WCD from the pipeline for the Northeast Response Zone is (b) (7)(F), (b) (3) of (b) (7)(F), (b) (3).

### **Historical Discharge Comparison**

A review of historical releases from the Colonial system shows that the largest release volume in the Northeast Response Zone was 12,802 bbl which does not exceed either of the WCD estimates for the tankage or pipeline scenarios.



# Colonial Pipeline Company

## NORTHEAST RESPONSE ZONE

### WORST CASE DISCHARGE – SCENARIO

Dorsey Junction Tank Farm  
Carroll County, Maryland

#### A. Purpose

This section provides a discussion of the worst case discharge scenario developed for the Northeast 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) (7)(F), (b) (3) .

#### B. 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.

#### C. Worst Case Discharge Response Scenario

##### Scenario Development

- (a). A worst case discharge scenario involving breakout tanks uses the single largest volume tank for the response zone adjusted for containment measures. (b) (7)(F), (b) (3) is surrounded by an earthen secondary containment dike common to six other tanks with sufficient capacity to contain the entire contents.
- (b) This scenario assumes a brittle fracture type failure similar to the Ashland Oil spill at Florette, PA on January 2, 1988. It is assumed that the spill would create a surge that would breach the tank dikes. For planning purposes it is assumed that (b) (7)(F), (b) (3) ary containment.
- (c) Located downstream of (b) (7)(F), is the retention pond that was designed to contain most spills depending upon the water level in the pond. It is assumed 25 percent ((b) (7)(F), (b) (3)) of the spilled volume would escape from the retention pond.

##### Time of Year/Weather

- (a) 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

## NORTHEAST RESPONSE ZONE

### WORST CASE DISCHARGE – SCENARIO

- (b) Scenario weather calls for a wet weather (steady rain) with temperatures in the mid-30's. The rain will provide additional means to transport spilled product into the South Branch Patapsco River.

#### Topography, Drainage and Resources at Risk

- (a) Topography of the area is graded flat within the breakout tank containment area (approx. elevation 575 ft). The breakout tank containment area drains into a retention pond (approx. elevation 510 ft). The surrounding land is gently rolling grassy hills. There is a drainage ditch of approximately 3500' length from the discharge of the pond to the South Branch of the Patapsco River. There is a swampy area before the ditch and river meet. The swamp discharges through a culvert pipe under a railroad into the South Branch Patapsco River. The elevation of the ditch ranges from approximately 490 ft at the discharge of the pond to approximately 450 ft at the South Branch of the Patapsco River.
- (b) For purposes of this exercise it is assumed that the product would flow out of the western area of the tank farm and into the retention pond. If the retention pond is overflowed, the product would flow into the drainage ditch, then into the South Branch Patapsco River. The South Branch Patapsco River flows into the Patapsco River approximately 10 miles downstream of the retention pond. The Patapsco River flows into the Chesapeake Bay, approximately 25 miles downstream of where the South Branch Patapsco River joins the Patapsco River.

For this scenario the volume of product that has overflowed the retention pond is (b) (7)(F), (b) (3) of the spill volume. In actuality, it is difficult to estimate the volume of product that would overflow the retention pond. During and after heavy or extended rainfall events the drainage ditch is flowing.

#### **D. Initial Incident Command Issues and Organization**

The local Operations Manager would act as the Colonial OSC (On-Scene Commander) until relieved by the Director of Operations. The 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 the Northeast District. In addition to personnel and equipment responding from the Northeast District, additional equipment and personnel would be immediately mobilized from throughout the Colonial system.

Upon arrival onsite, Colonial would also work closely with officials from USCG Baltimore, US EPA Region III, the Maryland Department of the Environment, and the Maryland Department of Natural Resources to identify natural resources, historic sites, and



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archeological sites 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. There are at least three known sensitive species areas in the immediate spill vicinity. These areas are identified as 91-384, 91-357, 91-282 on the md.merlin.net website. The Hugg-Thomas Wildlife Refuge and the Patapsco Valley State Park are located approximately three miles downstream of Dorsey Junction Tank Farm on the South Branch Patapsco River. Other Environmentally Sensitive Areas that have been identified in the US EPA and USCG Area Contingency Plans are listed in Section 9 of this Plan.

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 Northeast District and the Atlanta Response Team would be mobilized. This would result in an initial compliment of approximately 20-30 Colonial personnel onsite within the first six hours of the response with an additional 5-10 support personnel mobilized at 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.

#### Issues Confronting Local IC:

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

Weather

Time for product to reach river through the swampy area at the end of the drainage area.

Not all facility personnel will be immediately available.

#### 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.

The Patapsco River flows easterly in an area that is primarily uninhabited except for the town of Sykesville, approximately 3½ miles downstream of Dorsey Junction Tank Farm. Sykesville Fire Department and Police Department will be consulted as to the need for an evacuation around the river in Sykesville.



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There are three sensitive areas as denoted on the md.merlin.net website. We would work directly with the Maryland Department of the Environment to best minimize the impact to these species. Additional sensitive areas are identified in Section V of this Plan.

As indicated in Section 9.06 of this Manual, there are no public water supply intakes potentially at risk within ten miles of this scenario. (b) (7)(F), (b) (3)

#### E. Countermeasures

##### **Colonial:** Notification

Upon discovery of the release by operations personnel at Dorsey Junction Tank Farm, 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:

- (1) 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.
- (2) Determine Colonial resource needs and availability within the Northeast District, another district, and Atlanta office personnel. Mobilize these resources in a timely manner to fulfill the 24 hour planning cycles.
- (3) Locate additional areas for containment/recovering besides those noted on Colonial response maps CB-1, CB-2, and CB-3.
- (4) Determine the number of additional Colonial OSRO's and other spill response personnel needed for oversight, cleanup, containment, and countermeasures.
- (5) Determine how much equipment will be necessary for containment, countermeasures, and cleanup actions.
- (6) Decide who will provide the additional equipment.
- (7) Prioritize response efforts for environmentally sensitive areas.



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#### 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 OSRO 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.

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

Triumvirate Environmental Service – Baltimore, MD (2 hrs)  
 Miller Environmental Group, Inc. – Baltimore MD (2 hrs)  
 MSRC – Baltimore, MD and New Jersey (4 hrs)

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

Central Virginia Maintenance – Buckingham, VA (7 hrs)  
 Atlantic Welders – Baltimore, MD (2 hrs)  
 ITS - Richmond, VA (4 hrs)

This action could provide at least 100 additional HAZWOPER trained personnel as labor for the response operation, as well as several thousand feet of boom, skimmers, earth moving equipment, pipeline repair equipment and other appropriate equipment for response operations.

#### Governmental Agencies:

In accordance with the initial Notification Procedures and listed in Section 2 of this Manual, the following Federal and State Agencies would be notified:

- National Response Center
- Maryland State Police
- Maryland Department of the Environment Waste Management Administration
- Carroll County, Howard County, and Baltimore County Local Emergency Planning Committees
- Local Fire and Police

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:

- Office of Pipeline Safety



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## NORTHEAST RESPONSE ZONE

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

#### **F. Isolation**

Colonial's operations personnel would isolate the affected tank by closing the manifold (b) (7)(F), (b) (3) 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.

Access to the facility could be impaired depending upon the local Fire Marshall's decision to keep MD Highway 97 open or closed until it has been determined if an explosive atmosphere exists at the Highway 97 – South Branch Patapsco River crossing. For the purpose of this scenario it is assumed that the road will remain open. Because of the distance of the spill from occupied buildings at Dorsey Junction and the direction of spill travel away from the property, it is unlikely that evacuation of the facility would be necessary.

#### **G. 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. As is clear from the information discussed thus far, the extent of travel of the spill upon arrival of the Response Team would be dependent upon several variables.

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 progresses away from the initial site towards the Patapsco River and the Chesapeake Bay, further air monitoring would be required at all points where public contact with the spill was likely. Access to these areas would be controlled accordingly.

Spread of the spill over the containment dike surrounding Tank 1070 could reasonably be assumed to be contained within the surrounding containment dikes, which all drain to the retention pond east of Tank 1070. Any discharge from the spillway of the pond will follow a ditchline flowing generally southeast off Colonial property into the South Branch Patapsco River. It is very difficult to accurately estimate what quantities of product would reach the retention pond and be transported away from the facility. 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 by the retention pond.



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It is difficult to estimate the amount or speed at which spilled product would reach the ditchline. For purposes of this scenario, it is assumed that the leading edge of the spill would reach the ditchline within forty-five minutes of the release. After the discharge of the pond, there is a permanent underflow dam in place. This would provide another recovery point.

At the entry point from the swamp outlet to the river, there is a concrete headwall with a 36" diameter corrugated metal culvert pipe.

The South Branch Patapsco River is a fast waterway. For the purpose of this scenario, it is estimated that the average channel velocity is approximately 3 ft/s; however, in flood conditions the rate could be higher. The following landmarks have been identified downstream of the release entry point: (See table on below)

Approximate distance downstream from previous segment (feet):	Approximate time from previous segment:	Item:
	45 min	Breach of Retention Pond
3,000	15 min	Swampy area between ditch and river
500	30 min	Entry Point to South Branch Patapsco River
13,000	75 min	Recovery Pt CB2-1
8,000	45 min	Recovery Pt CB2-3
19,000	105 min	Recovery Pt CB2-5
7,000	30 min	Recovery Pt CB2-4
39,000	215 min	Recovery Pt CB3-4 Final Recovery
Totals: 89,500	560 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 fuel oil was pooled on the ground between the dike of (b) (7)(F), and the retention pond
- a significant volume of fuel oil has infiltrated into the fine to medium grained sandy soils between the dike of Tank 1070 and the pond
- a large amount of fuel oil is on the retention pond and is expected to overflow into the ditch leading to the South Branch Patapsco River.

The top priority activity would be to discuss with the FOSC and MD OSC the need for an immediate evacuation of the public along the South Branch Patapsco River. 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. Local law enforcement, and local fire personnel would assist in the evacuations. Colonial would



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work with these personnel to ensure that the public is adequately compensated for costs associated with the evacuation.

Once the immediate safety of the general public had been assured, 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 and communicate these locations to Planning.

#### **H. Containment and Collection**

Several factors would hamper efforts to collect and contain released fuel during the early stages of this release. The combined effects of continuing rain, darkness and high/fast water conditions on the river would make spill reconnaissance, assessment of suitable collection points and deployment of equipment extremely 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. Vac trucks, skimmers, and containment boom would be used for recovery of product on the South Branch Patapsco River.

The response would be broken down into three zones. Triumvirate Environmental and or Miller Environmental would be the OSRO's for the containment and recovery efforts on the tank farm, including the efforts to contain the spill at the railroad culvert just upstream of the South Branch Patapsco River (Zone 1). Miller Environmental and HEPACO would be the OSRO's for Zone 2, which would run along the South Branch Patapsco River from the entry point of the spill into the river to and including Recovery Point CB2-5. This zone includes the wildlife management area and the state park. Miller Environmental and Clean Harbors would be the OSRO's for Zone 3, downstream of Recovery Point CB2-5. This area would be our final recovery and protective booming areas.

Containment efforts would begin on the tank farm. The dike drain would be closed, if not already. A permanent underflow dam exists just downgradient of the gravel facility road. Also, a Atlantic Welders crew would be dispatched to seal off the culvert under the railroad between the swampy area and the river. This effort would be to keep the fuel oil from reaching the South Branch Patapsco River. For purposes of this exercise, it is assumed that these efforts would be unsuccessful, and product would reach the South Branch Patapsco River.

Product will enter the South Branch Patapsco River along the north bank and immediately be transported downstream.



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#### WORST CASE DISCHARGE – SCENARIO

Potential impacts to the Hugh Thomas Wildlife Management Area and the Patapsco Valley State Park within four miles of the entry point into the South Branch Patapsco River should be determined and protective booming utilized as appropriate.

Skimmers and vac trucks would be used to recover product at each recover point after containment has been achieved. Containment will be achieved with 12" boom utilizing jon boats for deployment. At least two rows of each at each recovery point. The boom shall be installed at an angle of 45 degrees or greater to the shoreline. Frac tanks would be obtained for temporary storage and as an oil water separator, if allowed by the state, at each recovery point. The separators 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% 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. They also will aid in providing inexpensive storage when recovery rates towards the end of the project are reduced, and demurrage costs make direct discharge into tanker trucks or vacuum units too costly.

Recovery point CB2-1 is the best initial deployment point on the South Branch Patapsco River. At least two rows of containment boom would be deployed all the way across the river at this point. The current should cause a significant portion of the plume to disperse along the north bank and enter this potential recovery point. Truck access appears reasonable and is assumed to be readily useable both for deployment and recovery efforts with no immediate improvements required.

Recovery Point CB3-4 Final Recovery would be simultaneously set up by Clean Harbors. This site would be set up as our final recovery point. That is, our goal would be to not let any product downstream of this site. This site would have at least three rows of containment boom. Truck access appears reasonable and is assumed to be readily useable both for deployment and recovery efforts with no immediate improvements required.

(b) (7)(F), (b) (3)

Similar containment and recovery sites would then be set up as necessary at the following locations:

Recovery Pt CB2-4

Recovery Pt CB2-5

As above referenced 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 behind the boom and determining if such collection rates are exceeding recovery rates.



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Adjustments in increasing recovery equipment is the first priority, however, it is possible that timeline projections may prove that additional booming would need to take place. This could involve adding an additional parallel boom or adding another anchor point location and such a location should be identified in advance, anchor weight secured for deployment, and perhaps access improvements made as a part of contingency planning.

Sustaining recovery actions involves having a place to store recovered oil in a location(s) and of sufficient volume to keep up with recovery. Temporary storage tanks (frac) may need to be mobilized.

Contingency measures include installing shoreline and dock 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 efforts hence costs and should be protected. The concept that a little oil will go a long way in these last two areas should be considered. Boat cleaning and intake cleaning of even minor contamination is labor intensive and should be avoided at significant cost. The balance of the boom would be utilized for these types of protective measures.

Nonetheless, 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 fuel oil, efforts at containment would be established at downstream locations prior to the arrival of the leading edge of product whenever possible.

Information should continue to be gathered throughout the incident for operational purposes. This information would be utilized in developing the 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:



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- 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.

Due to the potential to impact a larger area, cleanup operations should include all local agencies, the State and Federal Fish and Wildlife Agencies, and technical expertise should be solicited from USCG Strike Team, state agency representatives, downstream counties and municipalities.

Methods of containment, countermeasures and cleanup:

- Mobilize personnel, vacuum trucks, skimmers, boom, boats, absorbent, temporary storage, light towers, aircraft/surface surveillance, and debris disposal.
- Boom retention pond and South Branch Patapsco River as identified as Maps CB-1, CB-2, and CB-3. Locate additional areas for containment and recovery.
- Build underflow dams along ditchline from retention pond to river.
- Seal off culverts along ditch at facility road and at railroad where creek meets South Branch Patapsco River
- Deploy boom to protect critical areas, including environmentally sensitive areas and water intakes
- Deploy recovery equipment as per reconnaissance input.
- Establish unified incident command center at Dorsey Junction.
- Safely recover and contain fuel oil at collection and recovery points recognizing health and other safety hazards.



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## NORTHEAST RESPONSE ZONE

### WORST CASE DISCHARGE – SCENARIO

- Clean stream and riverbanks as necessary/appropriate.
- Coordinate disposal.
- Monitor.
- Collection of oil laden debris.

#### I. Resources

Equipment: Initial response would be limited by OSROs ability to mobilize equipment and immediate response would be limited to equipment and supplies immediately available. The deployment of equipment would be hampered by darkness and high water levels. For the initial response, the primary Colonial OSROs will be Miller Environmental, Triumvirate Environmental, IMS, and Clean Harbors, each of whom have regional offices in Baltimore. Miller Environmental and Triumvirate Environmental would deploy their available resources for containment and recovery efforts from the spill site to the entry point into the South Branch Patapsco River (Map CB1-1). Miller and HEPACO would deploy all of their available resources for containment, recovery, and protection along the South Branch Patapsco River from the entry point of the spill on to and including recovery pt CB2-5. Clean Harbors would deploy all available personnel and equipment for containment and protection downstream of Recovery Point CB2-5. Containment boom 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. In addition, HEPACO would mobilize all available resources from their other regional offices located at Fredericksburg, Virginia; Richmond, Virginia; and Norfolk, Virginia. Triumvirate Environmental would mobilize all available resources from their other regional offices in Dumfries, Virginia; Carlisle, Pennsylvania; and Salisbury, Maryland.

All resources would rally to the incident command center, be broken up into four six-man teams with a designated Foreman, provided a communication device along with an identification name/number, 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 minimum response resources for this scenario are listed in section 1.06.04 Minimum Response Resources.

Colonial or OSROs 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.



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

#### J. Resource and Procurement

OSROs will provide all primary response equipment. Additional equipment and resources (i.e. cleanup contractors) will be procured as necessary by the IC.

Response time for all resources:

- (1) Colonial personnel on scene for containment would take action immediately. All District response personnel and equipment and the Atlanta Response Team would be onsite within seven hours. Local OSROs from Baltimore would be onsite within 2 hours.
- (2) Other District response teams, additional main office personnel and contractors.
  - Southeast District (Response Zone 802) including tanker trucks and USCG-approved OSROs – 5 to 30 hours
  - Gulf Coast District (Response Zone 801) and Southeast District (Response Zone 802) including tanker trucks and USCG-approved OSROs - >30 hours.
- (3) OSRO's from New York, NY - 8 hours.
- (4) OSRO's from Trenton, NJ. – 6 hours.
- (5) MD Department of Environment response team - 3 hours.
- (6) USCG Strike Team - less than 6 hours.

In summary, sufficient contracted USCG-approved OSROs with containment and recovery equipment will be mobilized and operational within the required tiered response times. In addition, sufficient manpower will be available for a sustained response.

#### 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.



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#### 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.

Disposal options are discussed in detailed Section 9.02 of this plan and will be followed accordingly.

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. Advice should be obtained from the FOSC and state environmental agency overseeing the response. One specific device to measure water cleanliness is the sheen test. However, this is not an all encompassing tool for measuring the cleanup. Another tool for determining termination is any shoreline assessment activity. After all involved parties have met and thoroughly assessed the area and determined the cleanup to be satisfactory, then the cleanup operation can be terminated.

Efforts would be made to contain the fuel oil close to the tank farm and the retention pond. However, this action may not be feasible dependent upon the explosive atmosphere and hydrocarbon levels detected in the area of operations.

Contained product would be collected and placed into tank trucks at or near the recovery points or docks. Arrangements would be made with the appropriate governmental agencies to transport the product to the Dorsey Junction Tank Farm or another alternate tank farm nearby. In addition to collection of all detectable “free product”, Colonial would work with the FOSC to establish other suitable means of site mitigation.

#### **K. Site Discontinuation**

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 the worse case discharge. Included are the resources from Oil Spill Response Organizations (OSROs), other contractors, equipment and vendors.

The Project Leader is also 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-US 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.

The following table lists the minimum response resources needed to address the worst case scenario.

#### Minimum Resources for the Worst Case Discharge

Resource	Quantity Needed	Quantity Available By Source			Quantity Available on Site by Time		
		OSROs	Colonial	Others	Tier 1	Tier 2	Tier 3
Harbor Boom - 6" or Larger skirt	25000'	25000'		-	5000'	15000'	25000'
Absorbant Boom	25000'	25000'		-	5000'	15000'	25000'
Skimmers - drum or floating weir, 20 - 100 gpm	20	20		-	4	12	20
Air Compressor	20	11		9	4	12	20
Frac tank - 20,000 gal+ capacity each	20	10		10	4	12	20
Vac Trucks	10	5		5	2	6	10
Tanker Trucks	40	9		31	8	24	40
2" Air pumps	30	20		10	6	18	30
16' - 24' foot boat w/ motor	10	5		5	2	6	10
Bundles of absorbent pads - 3M-type 126, 100 per bundle	50	25		25	10	30	50
Air hose for pumps and skimmers	7000'	5000'		2000'	1400'	4200'	7000'
21' Boom deployment boat w/ 65 hp motor	5	5		-	1	3	5
Response Personnel	300	195	40	65	40	160	300
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					



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## NOTIFICATION & MOBILIZATION PROCEDURES

Should an emergency occur, it becomes the responsibility of the employee who first becomes aware of an emergency 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:

1. Caused a death or a personal injury requiring hospitalization;
2. Resulted in either a fire or explosion not intentionally set by the operator;
3. 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;
4. 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



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## NOTIFICATION & MOBILIZATION PROCEDURES

5. 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 Strike Team. The Strike Team is activated for significant spills or emergencies. A roster listing the members of the Strike 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 Strike 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 and blackberries
- emails to PCs and blackberries

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** responders are split into two classifications: "Primary" and "Non-Primary".

#### ➤ Primary Responders

Primary responders consist of select Strike Team members and other key management and support personnel. Primary responders are identified in section 5.01 of this plan. **Primary responders are to telephone the Control Center (678-762-2263) within 15 minutes of receiving notification to advise of their availability.** The Control Center initiates follow-up telephone calls to Primary responders who do not contact the Control Center within 15 minutes. The Control Center provides the Strike Team Planning Section Chief with a report of Strike Team member availability within 45 minutes so the information is available for the 1 hr conference call.

#### ➤ Non-Primary Responders

Non-Primary responders are not to contact the Control Center upon receiving a Group 4 notification (except for notification tests). They are simply be advised to the emergency situation and will be given further instructions for engagement as required.

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



# Colonial Pipeline Company

## NOTIFICATION & MOBILIZATION PROCEDURES

### Instructions for Sending Group Notifications

- Group notifications are sent using Microsoft Outlook and the following steps:
  1. From Outlook, click on the “New Mail Message” button in the upper left-hand corner
  2. In the “To” box type select the following combinations based on initiation of Group 4 or Group 8 Notification. **Initial Group 4 Notifications should only be performed by the Control Center. Group 8 Notifications should be initiated by designated District Personnel.**

For **Group 4 Notifications**, select ER\_Group4\_All from the Outlook address book. Alternatively select ER\_Group4\_Cell and ER\_Group4\_Email.

For **Group 8 Notifications**, Select ER\_Group8\_XXX\_All from the Outlook address book (where XXX represents District – e.g. GCD, SED, or NED). Alternately, select ER\_Group8\_XXX\_Cell and ER\_Group8\_XXX\_Email

3. In the “Subject” box type **Group 4 Notification** or **Group 8 Notification**.
4. In the body of the message include pertinent information about the incident as described below.
5. Click on “Send”

#### ➤ 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 Microsoft Outlook 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



# Colonial Pipeline Company

## NOTIFICATION & MOBILIZATION PROCEDURES

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

Communication via the phone 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 & 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.

### **Strike Team Mobilization**

Within 1 hour of the initial group notification, a conference call should be initiated by the Control Center and led by the Incident Commander with participation by select District and Strike Team members. Announcement of the time of the call, conference telephone number, and conference code information will be made via a separate text notification. The Strike Team Planning Section Chief will advise the Control Center of the specific participants to be sent the notification based on who is available for the given event. The conference call should last no longer than 20-30 minutes.

### **Participants**

- All 4 Strike Team Incident Commanders plus local OM
- Day shift Strike Team Safety Officer plus local Safety Officer
- Day shift Strike Team Public Information Officer and Liaison Officers
- Current District and day shift Strike Team Section Chiefs (Operations, Planning, Logistics, and Finance)
- Adjacent district Operations Chief (nearest to spill location)
- Current District and Strike Team Resource Unit Leader
- District Documentation Unit Leader



# Colonial Pipeline Company

## NOTIFICATION & MOBILIZATION PROCEDURES

### Agenda

- Roll call, ground rules
- Current state of the response
- Initial action plan
- Identification of any significant gaps of concern
- Confirmation that immediate external resources (OSROs & critical consultants) have been mobilized
- Confirmation that required agency notifications have been made
- Location of incident command post and staging
- Identification of who will be filling the Strike Team Command Staff and Section Chief positions and their estimated times of arrival
- Confirmation that the command staff and section chiefs are assembling their organizations for both day and night shifts and identification of any significant personnel gaps of concern
- Set the shift schedule for the next work period and the time for the next work period to begin.

### 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:

- Information Officer (Strike Team)
- Government Liaison (Strike Team)
- ICS Consultant Team (The Response Group)
- 3<sup>rd</sup> 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 3<sup>rd</sup> Party Monitoring Contractor.

During the 1<sup>st</sup> 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)



# **Colonial Pipeline Company**

## **NOTIFICATION & MOBILIZATION PROCEDURES**

After Hours:

855-512-7952

On-line (Concur):

<https://www.concursolutions.com/travelhome.asp>

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, etc.), 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:

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

### Emergency Communications Equipment Locations

- 1) Traditional land lines where available
- 2) Over 600 cell phones are distributed throughout the company
- 3) Over 200 cellular data cards distributed throughout the company
- 4) Over 100 Nextel two-way radio phones are distributed throughout the company
- 5) 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
- 6) 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

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)



# Colonial Pipeline Company

## COMMUNICATION METHODS & EQUIPMENT

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.

- 1) You must be outside, with an unobstructed view of the sky (unless you are using a docking station or other exterior antenna configuration).
- 2) Turn the unit on; raise the integrated swivel antenna; the unit will register with the Iridium network.
- 3) Wait until you see a signal strength of at least three bars.
- 4) 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	Michelle Carnes	X	GCD
07	866-211-1332	Collins Tank Farm	Ann Brashier		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	Gordon Cannon Preston Seagraves	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	Susan Adams	X	SED
15	866-396-0859	Southeast District Office	Val Harlow	X	SED
16	866-435-6959	Director of Operations (Paste)	Darren Pruitt		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	Director, HSSE	Tom Cervino		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



# EMERGENCY NOTIFICATION FLOWCHART

## Aberdeen Junction

806 West Jarrettsville Road Forest Hill, MD 21050

410-879-2260

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 $\geq$ 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

If spill < 5 gal, follow the THIRD notification requirement below.

### 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

Harford County Emergency Operations Center  
Non-Emergency HAZMAT: 410-638-3400  
Division of Emergency Operations: 410-638-4900  
410-808-1698, 443-807-9230, 410-638-3529  
BG&E System Operator: Remote Emergency Shutdown of  
Facility Feeder # 33830: 410-597-6002

Fire: 911

Harford Country VFD: 410-638-4700  
Jarrettsville VFD: 410-692-7890

### THIRD: Notify Operations Manager \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150

\* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.



# EMERGENCY NOTIFICATION FLOWCHART

## Allentown Station

493 Ward Avenue Bordentown, NJ 08505

609-298-2454

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 $\geq$ 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

If spill < 5 gal, follow the THIRD notification requirement below.

### 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:

#### NOTIFY WITHIN 15 MINUTES:

**New Jersey Emergency Response Center**  
**1-877-927-6337**

Police: 911 (if within area) or  
Bordentown State Police Dispatch (24 hr) 609-298-1170

Fire: 911 (if within area) or  
Burlington County Dispatcher (24 hr) 609-267-8300

**THIRD: Notify Operations Manager** \* John Gentzler: Wk: 856-202-4068 Cell (b) (6)  
Home: (b) (6) \* 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

**# Director of Health, Safety, Security and Environmental**

**\* Tom Cervino Wk: 678-762-2217**  
**Cellular: (b) (6)**

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**

#### **Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### **Director of Operations \* Gerald Beck**

Cellular: (b) (6)

Home (b) (6)

\* Initiates Group 8 Notification

#### **District Project Leader \* Paul Senger**

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Amoco Junction

2201 Goodwin Neck Rd. Yorktown, VA 23692

757-877-5013

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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  
Office of Emergency Management  
(R. Paul Long) 757-890-3600  
Fire and Life Safety: 757-890-3621  
Non-Emergency 24 hour Line

Fire: 911  
Fire Chief/Director  
Stephen P. Kopczynski 757-890-3600

**THIRD: Notify Operations Manager** \* Trent Allen: **Wk: 804-375-9309 Cell: (b) (6)**  
**Home: (b) (6)** \* 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

**# Director of Health, Safety, Security and Environmental**

\* **Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)**

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**

**Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**

Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**

Work: 856-381-4675  
Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.



# EMERGENCY NOTIFICATION FLOWCHART

## Bel Air Station

2942 Charles Street Fallston, MD 21047

410-557-7348

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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

Harford County Emergency Operations Center  
Non-Emergency HAZMAT: 410-638-3400  
Division of Emergency Operations: 410-638-4900  
410-808-1698, 443-807-9230, 410-638-3529

Fire: 911

Bel Air VFD: 410-638-4401

**THIRD: Notify Operations Manager** \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150  
\* 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

**# Director of Health, Safety, Security and Environmental**

\* **Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)**

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**

**Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

**Director of Operations \* Gerald Beck**

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Booth Delivery

3398 Garnett Mine Road, Boothwyn PA 19061  
610-459-1238

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 $\geq$ 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  
Emergency Response Dispatcher for Upper ChiChester  
Police: 610-565-6500

Fire: 911  
Emergency Response Dispatcher for Ogden, Boothwyn, &  
Reliance Fire Companies: 610-565-6500

### THIRD: Notify Operations Manager \* John Gentzler: Wk: 856-202-4068 Cell: (b) (6)

Home: (b) (6) \* 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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Brandywine Station

1070 Kirk Road, Boothwyn PA 19061  
610-459-4748

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 $\geq$ 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  
Emergency Response Dispatcher for Upper ChiChester  
Police: 610-565-6500

Fire: 911  
Emergency Response Dispatcher for Ogden, Boothwyn, &  
Reliance Fire Companies: 610-565-6500

### THIRD: Notify Operations Manager \* John Gentzler: Wk: 856-202-4068 Cell (b) (6) Home (b) (6) \* 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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Bull Run Delivery

10291 Balls Ford Road Manassas, VA 20109

703-368-8616

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 $\geq$ 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	Fire: 703-369-1113
Police Non-Emergency 703-369-1113	
Prince William County 24hr Communications Center for Police, Fire and Rescue 703-792-6500	Prince William County Fire Chief & Emergency Services 703-792-6813

### THIRD: Notify Operations Manager \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150

\* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## BWI Delivery

Elm Road and Route 170, BWI Airport, MD 21240

410-859-5326

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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: (BWI Airport Police) 911 or 410-859-7040  
Signature Flight Support  
Emergency: 410-859-4181  
24/7 Operations: 410-684-3423

Fire: (BWI Fire Department) 911 or 410-859-7222

**THIRD: Notify Operations Manager** \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150  
\* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Chantilly Station

13100 Moore Road Clifton, VA 20124

703-830-8320

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 $\geq$ 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 703-691-2233

Fairfax County Police, Fair Oaks District 703-691-2131 Non Emergency

Fire Dispatch: 911 ( 703-691-2233 )

Fairfax County Fire Marshall & Deputy Chief,  
Dereck Baker 703-246-4753

### THIRD: Notify Operations Manager \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150

\* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.



# EMERGENCY NOTIFICATION FLOWCHART

## Commerce Road Delivery

5300 Commerce Rd  
Richmond, VA 23234  
804-271-2728 or 804-271-2709

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  $\geq$  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 (804)748-1236  
Chesterfield County LEPC (804)748-1236  
(Asst. Emergency Services Coordinator: Linda Price)

Fire (804)748-1236

**THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cell: (b) (6)**  
Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)  
\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Conowingo Station

105 Old Hill Top Road, Colora, MD 21917  
410-658-4006

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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 (if within area) or  
Maryland State Police (NE Barrack): 410-398-8101  
  
Sheriff: 410-398-3344

Fire: 911 (if within area) or 410-398-3815

**THIRD: Notify Operations Manager** \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150  
\* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Craney Island Delivery

Craney Island Fuel Terminal, Portsmouth, VA 23703

757/484-9410 or 757/545-7004

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 $\geq$ 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 if within area or 757-923-2350	Fire:	911 (if within area) or 757-923-2350
Suffolk LEPC (James G. Vacalis)	757-923-2110		

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cellular (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Craney Island Junction

Shoulders Hill Rd., Rt. 626, Suffolk, VA 23435

757/488-8405

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 $\geq$ 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 757/925-1439  
Suffolk LEPC (James G. Vacalis) 757/934-3111

Fire (911) or 757/538-0519

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cell: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Curtis Bay Delivery

801 E. Ordnance Road, Curtis Bay, MD 21226

410-789-7665

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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: Northern District Anne Arundel Co Police  
911 or 410-222-6135

Fire: 911 or 410-987-1212  
Fire Chief: 410-222-8300  
Fire Marshall: 410-222-8200

**THIRD: Notify Operations Manager** \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150  
\* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

**Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)

Home (b) (6)

**Director of Operations \* Gerald Beck**

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.







# EMERGENCY NOTIFICATION FLOWCHART

## Dulles Delivery

Washington-Dulles International Airport, Gate #317  
Air and Space Museum Parkway, Sterling, VA 20166  
703-996-0231

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 $\geq$ 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:	703-572-2950	Fire:	703-572-2980
Metropolitan Washington Airport Authority, Washington Dulles International Airport Emergency Operations:	703-572-2730	Firehouse, Metropolitan Washington Airport Authority, Washington Dulles International Airport Hazmat Response Team:	703-572-2970
Fairfax Delivery Operations Emergency Phone:	703-323-5485 or 703-323-0025	Air BP Operations Manager:	703-572-2747
		IAD Operations:	703-572-2730
		Direct Fire Alarm to Dulles Airport Fire Department:	703-661-9211

### THIRD: Notify Operations Manager \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150

\* 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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Eagle Point Delivery

Rt 130 & I-295 (Exit 23) Coastal Refinery, Westville, NJ 08093  
856-845-6430

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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:

**NOTIFY WITHIN 15 MINUTES:**

**New Jersey Emergency Response Center  
1-877-927-6337**

Police: 911 (if within area) or  
NJ State Police Bellmawr Barracks 856-933-0550

Fire: 911 (if within area) or  
Gloucester County Fire/Ambulance Dispatcher: 856-589-0911

**THIRD: Notify Operations Manager** \*John Gentzler **Wk:** 856-202-4068 **Cell:** (b) (6)  
**Home:** (b) (6) \* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino **Wk:** 678-762-2217 **Cellular:** (b) (6)

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**

**Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**

Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**

Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Fairfax Delivery

9555 Colonial Avenue Fairfax, VA 22031  
703-323-0025

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 703-591-5522	Fire:	911
Fairfax County Police Chief	703-246-2195	Fairfax County Fire	703-246-2546
Fairfax City Police	703-385-7924	Fairfax City Fire	703-385-7830/ 703-385-7924 (after-hrs)
Fairfax County Police Non-Emergency:	703-691-2131		

### THIRD: Notify Operations Manager \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150

\* 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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Finksburg Junction

1085 Driver Road Marriottsville MD 21104  
(No phone at facility call Dorsey) 410-970-2130

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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: Howard County	911 or 410-313-2950	Fire: Howard County	911 or 410-313-2950
	410-313-3200		410-313-6000
		Emergency Mgmt Fire and Rescue:	410-313-6004

**THIRD: Notify Operations Manager** \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150  
\* 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

**# Director of Health, Safety, Security and Environmental**

\* **Tom Cervino** Wk: 678-762-2217 Cellular: (b) (6)

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**

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)  
\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Gaithersburg Station

601 Professional Drive Gaithersburg, MD 20879

301-948-1211

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

### **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  
Montgomery County Police Non Emergency 301-279-8000

Fire: 911 or 240-777-0744

### **THIRD: Notify Operations Manager \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150**

\* 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

#### **# Director of Health, Safety, Security and Environmental**

\* **Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)**

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**

#### **Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### **Director of Operations \* Gerald Beck**

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### **District Project Leader \* Paul Senger**

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Girard Point Delivery

Bartram Avenue (Sun Refinery Gate) Philadelphia, PA 19153  
215-365-5383

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 $\geq$ 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	Fire:	911
12 <sup>th</sup> District Police	215-686-3120		

### THIRD: Notify Operations Manager \* John Gentzler Wk: 856-202-4068 Cell: (b) (6) Home: (b) (6) \* 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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

#### # Vice President of Operations, or # Senior Vice President.

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Hancock Station

336 Pump Handle Road, Charlotte Courthouse, VA 23923

434/376-3127

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 $\geq$ 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 434/542-5131  
Charlotte County, VA LEPC 434/542-5117  
(County Administrator – Russell B. Clark)

Garland (Butch) Hamlett – LEPC 434-568-6451

Fire (911) or 434/542-5141 (24 Hours)

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 804/375-9309 Cellular: (b) (6) Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30



# EMERGENCY NOTIFICATION FLOWCHART



# EMERGENCY NOTIFICATION FLOWCHART

## Hill Delivery

End of Republic Rd, Chesapeake, VA 23324  
757/543-2988 or 757/545-7004

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 757/382-6161  
Chesapeake Volunteer EMS Auxiliary 757/382-6369  
(Chairman – Steven Best)

Fire (911) or 757/382-6464  
Fire Marshall 757/382-6566

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7005 Cell: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate.

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## James River Station

3857 E. River Road Columbia, VA 23038

434/842-3873

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 $\geq$ 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 434/589-8211  
Fluvanna County LEPC 434/591-1910  
(Coordinator – Cheryl Wilkins)

Fire (911) or 434/589-8211  
Fluvanna County Sheriff's Office 434/589-8211

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 804/375-9309 Cell: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Landenburg Station Parsons Road Kemblesville, PA 19347 610-255-4556

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  $\geq$  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 (if within district) or  
Avondale State Police Dispatch

610-268-2022

Fire: 911 (if within district) or  
Chester Co Fire Dispatch

610-436-4700

**THIRD: Notify Operations Manager \* John Gentzler Wk: 856-202-4068 Cell (b) (6)**  
Home: (b) (6) \* 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

### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)  
\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Linden Junction 400 Blair Road Avenel, NJ 07001 732-734-2031

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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:

### NOTIFY WITHIN 15 MINUTES:

New Jersey Emergency Response Center  
**1-877-927-6337**

Police: 911 (if within area) or  
NJ State Police Dispatch: 732-548-2313  
Woodbridge Police Department: 732-634-7700  
Fire 911 (if within area) or  
Fire Dispatch for Woodbridge, Avenel and Port Reading  
Fire Departments: 732-634-7700

**New York – Staten Island: Notify within 2 Hours:**  
**N.Y. 24 Hr. Spill Hotline (DEC) - 518-457-7362** (out of state) - **800-457-7362** (in state)  
**NY State Dept. Public Services (DPS) – 518-474-7080**  
**NYCDEP Communication Center – 718-595-4646**  
Police and Fire 911 (if within area) or  
Staten Island Police 646-610-5000  
Fire Department 718-727-1100

**THIRD: Notify Operations Mgr.\* Al Kressley Wk: 732-734-2050 Cell: (b) (6)**  
Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

In the event the Associate Director of Operations 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

**# Director of Health, Safety, Security and Environmental**

**\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)**

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**

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)

**\* Initiates Group 8 Notification**

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
**\* Initiates Group 8 Notification**

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

Responsible Parties for government notification, along with contact information, is included in



# EMERGENCY NOTIFICATION FLOWCHART

Corporate Procedure 30.

## Locust Grove Station

29387 Constitution Hwy, Hwy 20 East, Rhoadesville, VA 22542  
540/854-4588

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 $\geq$ 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 540/672-1200  
Orange County LEPC Office: 540-661-5429  
(Emerg. Coord – Craig Johnson) Office: 540/672-6374

Fire (911) or 540/672-1234

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 804/375-9309 Cell: (b) (6)

Home (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Louisa Station

1332 Harris Creek Rd, Louisa , VA 23093

540/967-0615

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 Louisa County LEPC (Emerg. Svcs Coord. – Michael Schlemmel Fire Chief – Keith Greene	(911) or 540/967-1234 Office: 540/967-3491 Cell : (b) (6) Cell: (b) (6)	Fire 911
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### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 804/375-9309 Cellular: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Lynchburg Station

891 Partridge Creek Road Amherst, VA 24521

434/846-5022

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 $\geq$ 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 Amherst County LEPC (County Administrator – Clarence Monday)	(911) or 434/946-7874 Office: 434/946-9305 4 Hr. 434/946-9300 Office: 434-946-9400	Fire (911) or 434-946-9300
Director of Public Safety – Gary Roakes Emergency Dispatch Number	434/946-9307 434/946-9300	

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 804/375-9309 Cell: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Maury Delivery

5801 Petersburg Turnpike, Richmond, VA 23234

804/275-9469

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 $\geq$ 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 804/748-1236  
Chesterfield County LEPC 804/748-1236  
(Ass't Emergency Services Coordinator : Linda Price)

Fire (911) or 804/748-1236

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cellular: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Mitchell Junction

425 Duncan Store Rd., Columbia, VA 23038

804/375-3414

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 804/492-4120	Fire	(911) or 804/492-4120
Cumberland County LEPC (24 Hour No.)	804/492-3625		
County Administrator– Vivian Giles			
LEPC Director – Jennifer Roberts - 804-492-9267			

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 804/375-9309 Cell: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Norfolk Delivery

513 Barnes Rd., Chesapeake, VA 23324

757/545-7004

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 757/382-6161  
Chesapeake Volunteer EMS Auxiliary 757/382-6369  
(Chairman – Steven Best)

Fire (911) or 757/382-6464  
Fire Marshall 757/382-6566

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cell: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## North Baltimore Delivery

5101 Erdman Avenue Baltimore, MD 21205  
410-327-7473

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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 410-396-2525

Fire: 911 or 410-396-2525

**THIRD: Notify Operations Manager \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150**  
\* 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

**# Director of Health, Safety, Security and Environmental**

**\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)**

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**

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)

**\* Initiates Group 8 Notification**

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
**\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Paulsboro Delivery

800 Billingsport Road Paulsboro, NJ 08066

856-202-4040

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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:

**NOTIFY WITHIN 15 MINUTES:**  
**New Jersey Emergency Response Center**  
**1-877-927-6337**

Police: 911 if within area or  
New Jersey State Police Bellmawr Barracks  
856-933-0550

Fire: 911 if within area or  
Gloucester Co Fire/Ambulance Dispatcher  
856-589-0911

**THIRD: Notify Operations Manager** \* John Gentzler **Wk:** 856-202-4068 **Cell:** (b) (6)  
**Home:** (b) (6) \* 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

**# Director of Health, Safety, Security and Environmental**

**\*Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)**

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**

**Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**

Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**

Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Pennsauken Delivery

Foot of Cove Road Pennsauken, NJ 08110

856-662-9130

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 $\geq$ 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

If spill < 5 gal, follow the THIRD notification requirement below.

### 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:

#### NOTIFY WITHIN 15 MINUTES:

**New Jersey Emergency Response Center**  
**1-877-927-6337**

Police: 911 if within area or  
Bordentown State Police Dispatch (24 hr)  
609-298-1170

Fire: 911 if within area or  
Camden Co Fire/Ambulance  
856-665-1111

**THIRD: Notify Operations Manager** \* John Gentzler Wk: 856-202-4068 Cell (b) (6)  
Home: (b) (6) \* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Pennsauken Junction

10 Elbo Lane Mt Laurel NJ 08054

856-235-6999

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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:

**NOTIFY WITHIN 15 MINUTES:**

**New Jersey Emergency Response Center  
1-877-927-6337**

Police: 911 if within area or  
Burlington County Dispatcher (24 hr)  
609-267-8300

Fire: 911 if within area or  
Burlington County Dispatcher (24 hr)  
609-267-8300

**THIRD: Notify Operations Manager \* John Gentzler Wk: 856-202-4068 Cell: (b) (6)**  
**Home: (b) (6) \* 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

**# Director of Health, Safety, Security and Environmental**

**\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)**

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**

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)  
**\* Initiates Group 8 Notification**

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
**\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Powhatan Station

1625 Dorset Road, Powhatan, VA 23139

804/598-2873

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 $\geq$ 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 804/598-5656 24hr  
Powhatan County LEPC 804/598-5646 Office  
(Emergency Services Director – Floyd Green)

Fire (911) or 804/598-5656

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cell: (b) (6)

Home: (b) (6) \* 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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Reisterstown Station

14035 Old Hanover Road Reisterstown MD 21136  
410-833-8321

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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:

Baltimore County Police:	911 or 410-887-5985	Baltimore County Fire:	911 or 410-887-4500
Maryland State Police	800-525-5555		
Maryland State Police Reisterstown	410-653-4200		

**THIRD: Notify Operations Manager** \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150  
\* 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

**# Director of Health, Safety, Security and Environmental**

\* **Tom Cervino** Wk: 678-762-2217 Cellular: (b) (6)

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**

**Environmental Manager \* Stan Carpenter**  
Work: 856-381-4683 Cellular: (b) (6)  
Home: (b) (6)

**Director of Operations \* Gerald Beck**  
Cellular: (b) (6)  
Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**  
Work: 856-381-4675  
Cellular: (b) (6)  
\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Remington Station

11578 Rogues Road Midland, VA 22728

540-788-4144

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	Fire:	911
Fauquier County Dispatch:	540-347-6843	Fauquier County Dispatch:	540-347-6843
		Fauquier County Hospital	540-347-2550

### THIRD: Notify Operations Manager \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150

\* 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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification e

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Richmond Delivery

1400 Goodes St., Richmond VA 23224  
804/233-4335

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 804/646-5100  
Richmond LEPC 804/646-6660  
(Hazardous Materials Coordinator-Robert Baumgardner)

Fire (911) or 804/646-5100

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cell: (b) (6)

Home: (b) (6) \* 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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Roanoke Delivery

1273 Mountain View Church Rd., Montvale, VA 24122-0062

540/947-2651

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 $\geq$ 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 (City) (911) or 540-586-0700	Fire (911) or 540/586-0700
Police (County) 540-586-4800	
Bedford County LEPC 540/586-7601	
(Public Safety Director – Jack Jones) 540/586-0700	(City Manager – Charles Kolakowski) 540-587-6001

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 804/375-9309 Cell: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Ruffin Delivery

3300 Deepwater Terminal Rd., Richmond, VA 23224  
804/232-4221

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 804/646-5100  
Richmond LEPC 804/646-6660  
(Hazardous Materials Coordinator-Robert Baumgardner)

Fire (911) or 804/646-5100

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cell: (b) (6) Home: (b) (6) \*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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## South Baltimore Delivery

3625 Fairfield Road Baltimore MD 21226

410-355-8155

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

**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 410-396-2525

Fire: 911 or 410-396-2525

**THIRD: Notify Operations Manager** \* Frank Gallo: Cell: (b) (6) Work: 410-970-2150  
\* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

**Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

**Director of Operations \* Gerald Beck**

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

**District Project Leader \* Paul Senger**

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.



# EMERGENCY NOTIFICATION FLOWCHART

## South Norfolk Delivery

2801 South Military Highway, Chesapeake, VA 23323  
757/487-5050

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 $\geq$ 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 757/382-6161  
Chesapeake Volunteer EMS Auxiliary 757/382-6297

Fire (911) or 757/382-6161  
Fire Marshall 757/382-6123

### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cellular: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Surry Delivery

5200 Hog Island Rd., Rte 650, Surry County, VA 23883

757/357-0249

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 $\geq$ 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 Surry County LEPC (Emergency Services Coordinator – Terry Lewis)	(911) or 757/294-5264 757/294-5271	Fire (911) or 757/294-5264
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### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cellular: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.



# EMERGENCY NOTIFICATION FLOWCHART

## Trenton Delivery

2785 Lamberton Road Trenton, NJ 08611

609-393-4003

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  $\geq$  5 gal.  
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.  
**If spill < 5 gal, follow the THIRD notification requirement below.**

### **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:

#### **NOTIFY WITHIN 15 MINUTES:**

**New Jersey Emergency Response Center  
1-877-927-6337**

Police: 911 if within area or  
New Jersey State Police Dispatch

609-298-1170

Fire: 911 if within area or  
Hamilton Twp Police & Fire Dispatch

609-581-4000

### **THIRD: Notify Operations Manager \* John Gentzler Wk: 856-202-4068 Cell: (b) (6)**

Home (b) (6)

\* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**

#### **Environmental Manager \* Stan Carpenter**

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### **Director of Operations \* Gerald Beck**

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### **District Project Leader \* Paul Senger**

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.







# EMERGENCY NOTIFICATION FLOWCHART

## Woodbury Junction

696 Mantua Grove Road West Deptford, NJ 08066

856-202-4040

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 $\geq$ 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

If spill < 5 gal, follow the THIRD notification requirement below.

### 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:

#### NOTIFY WITHIN 15 MINUTES:

**New Jersey Emergency Response Center**  
**1-877-927-6337**

Police: 911 if within area or  
New Jersey State Police Bellmawr Barracks 856-933-0550

Fire: 911 if within area or  
Gloucester County Fire/Ambulance Dispatcher  
856-589-0911

### THIRD: Notify Operations Manager \* John Gentzler Wk: 856-202-4068 Cell (b) (6)

Home (b) (6) \* 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

**# Director of Health, Safety, Security and Environmental**

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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**# See Section 5.01 for Contact Numbers**

#### Environmental Manager \* Stan Carpenter

Work: 856-381-4683 Cellular: (b) (6)

Home: (b) (6)

#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# EMERGENCY NOTIFICATION FLOWCHART

## Yorktown Junction

147 Blow Flats Rd., Williamsburg, VA 23185

757/887-3979

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 $\geq$ 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 757/566-4309 James City Emergency Services 757/566-4309 (Chief – Tal Luton) Newport News Water Works 757-234-4800 or 757-234-4889 Back Up Dispatcher 757-888-3382	Fire (911) or 757/566-4306
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### THIRD: Notify Operations Mgr.\* Trent Allen Wk: 757/545-7004 Cellular: (b) (6)

Home: (b) (6) \*Initiates Group 8 Notification, as appropriate

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

#### # Director of Health, Safety, Security and Environmental

\* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

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

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#### Director of Operations \* Gerald Beck

Cellular: (b) (6)

Home: (b) (6)

\* Initiates Group 8 Notification

#### District Project Leader \* Paul Senger

Work: 856-381-4675

Cellular: (b) (6)

\* 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 Manager following the guidelines of Corporate Procedure 30. The Director of Operations and the District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.



# **Colonial Pipeline Company**

## **LEAK DETECTION AND EMERGENCY PROCEDURES**

(b) (7)(F), (b) (3)





# Colonial Pipeline Company

## LEAK DETECTION AND EMERGENCY PROCEDURES

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'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.**

#### Information to Obtain



# **Colonial Pipeline Company**

## **LEAK DETECTION AND EMERGENCY PROCEDURES**

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 following page), 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 AND 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:
---

IS THERE FIRE OR PERSONAL INJURY? (IF YES, DETAILS)
---

HAVE THE FIRE AND POLICE DEPARTMENTS BEEN NOTIFIED?
---

LEAK REPORTED BY:
-------------------

NAME:	ADDRESS:	PHONE NUMBER:
-------	----------	---------------

TITLE OR ORGANIZATION:
------------------------

IF IT CAN BE DETERMINED, PRODUCT AT LEAK SITE: <input type="checkbox"/> GASOLINE <input type="checkbox"/> KEROSENE <input type="checkbox"/> FUEL OIL
--

<p><b><u>NOTICE</u></b></p> <p style="text-align: center;"><b>REPORTS ACCEPTED AS CONCLUSIVE EVIDENCE OF A LEAK REQUIRING THE LINE BE SHUT DOWN IMMEDIATELY:</b></p> <ol style="list-style-type: none"> <li>1. THE LINE HAS BEEN DAMAGED OR PUNCTURED BY EQUIPMENT.</li> <li>2. POLICE OR FIRE DEPARTMENT REPORTS VISUAL SIGHTING OF PRODUCT OR HAVE RECEIVED CALLS OF A VISUAL SIGHTING.</li> <li>3. SUDDEN CHANGE IN PRESSURE AND/OR FLOW RATE.</li> <li>4. INDIVIDUAL MAKES A POSITIVE REPORT OF PRODUCT SIGHTING.</li> </ol>
--

<p style="text-align: center;"><b>REPORTS OF THE FOLLOWING ARE TO BE INVESTIGATED WHILE CONTINUING TO OPERATE THE LINE WHILE MAINTAINING CLOSE OBSERVATION:</b></p> <ol style="list-style-type: none"> <li>1. REPORT OF ODOR</li> <li>2. REPORT OF SOIL DISCOLORATION.</li> <li>3. DEAD VEGETATION ON, OR IN THE VICINITY OF, THE RIGHT OF WAY.</li> <li>4. RECURRING MINOR HOURLY SHORTAGES.</li> </ol>
--

INVESTIGATION OF THESE REPORTS MAY CONFIRM THAT A LEAK EXISTS. IN THE EVENT OF A CONFIRMED LEAK, THE LINE WILL BE SHUT DOWN IMMEDIATELY, AND THE SEGMENT EVACUATED AND ISOLATED.
--

AFTER COMPLETING THE REPORT, THE PERSON RECEIVING THE CALL SHOULD REFER TO THE NOTIFICATION PROCEDURE AS SHOWN ON THE "EMERGENCY NOTIFICATION FLOW CHART." THIS CHART IS LOCATED IN THE "NOTIFICATION" SECTION OF THIS GUIDE.
---

INITIAL ACTION TAKEN (USE BACK OF FORM IF NECESSARY)
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Form 7082 – Revised 11/03/98



# Colonial Pipeline Company

## INITIAL RESPONSE ROLES & RESPONSIBILITIES

### 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



# Colonial Pipeline Company

## INITIAL RESPONSE ROLES & RESPONSIBILITIES

- 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

### 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 & RESPONSIBILITIES

### 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.)



# **Colonial Pipeline Company**

## **INITIAL RESPONSE ROLES & RESPONSIBILITIES**

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**

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



## **Colonial Pipeline Company**

### **INCIDENT COMMAND SYSTEM AND STRUCTURE**

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."

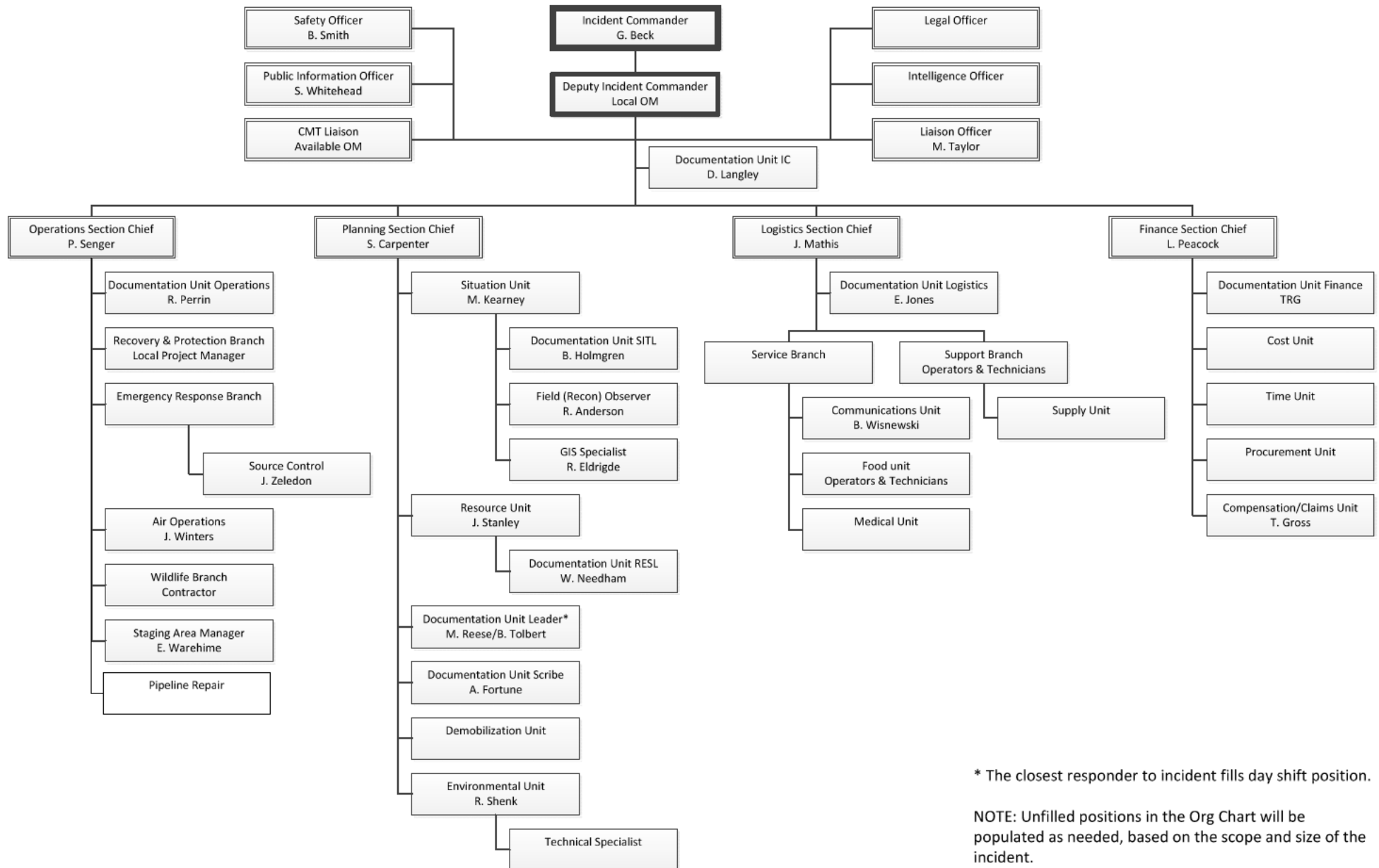
Advantages to using the ICS/UC include:

- 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**  
**Northeast Reponse Zone Spill Management Team-Day Shift**

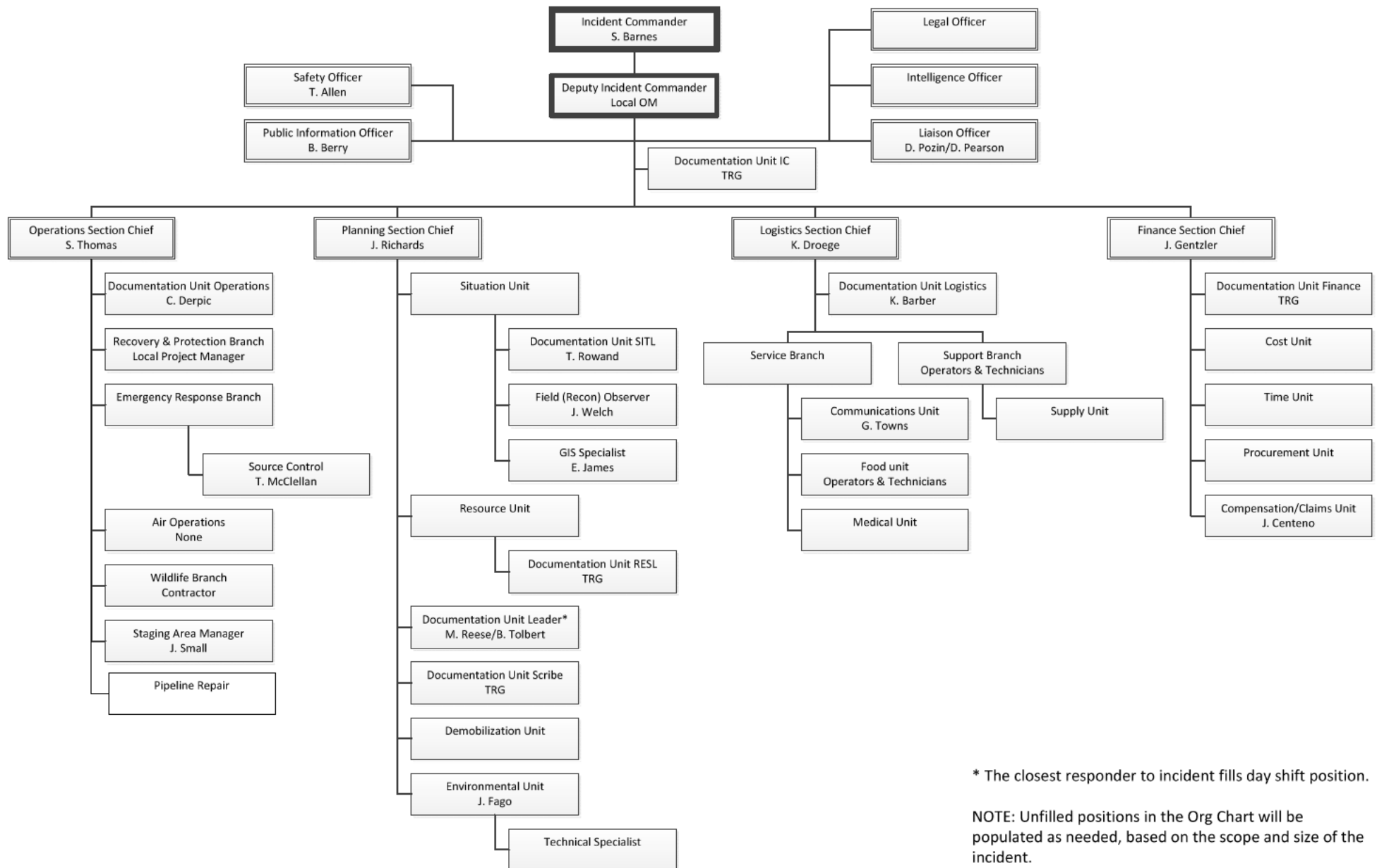




# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM AND STRUCTURE

### Northeast Response Zone Spill Management Team-Night Shift



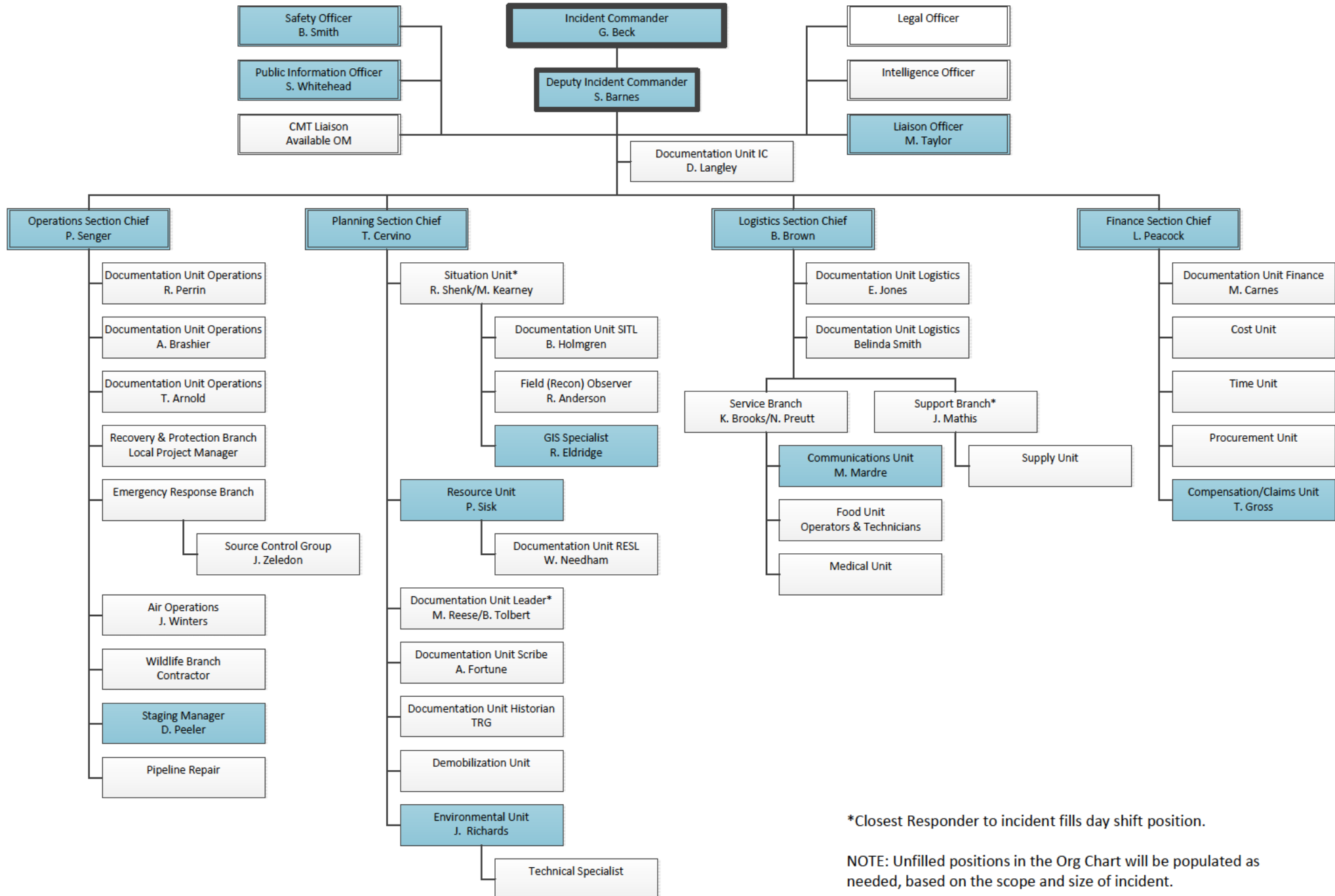
\* The closest responder to incident fills day shift position.

NOTE: Unfilled positions in the Org Chart will be populated as needed, based on the scope and size of the incident.



## Colonial Pipeline Company INCIDENT COMMAND SYSTEM AND STRUCTURE

### Northeast Response Zone Spill Management Team with Strike Team-Day Shift (Strike Team Positions Identified in Shaded Boxes)



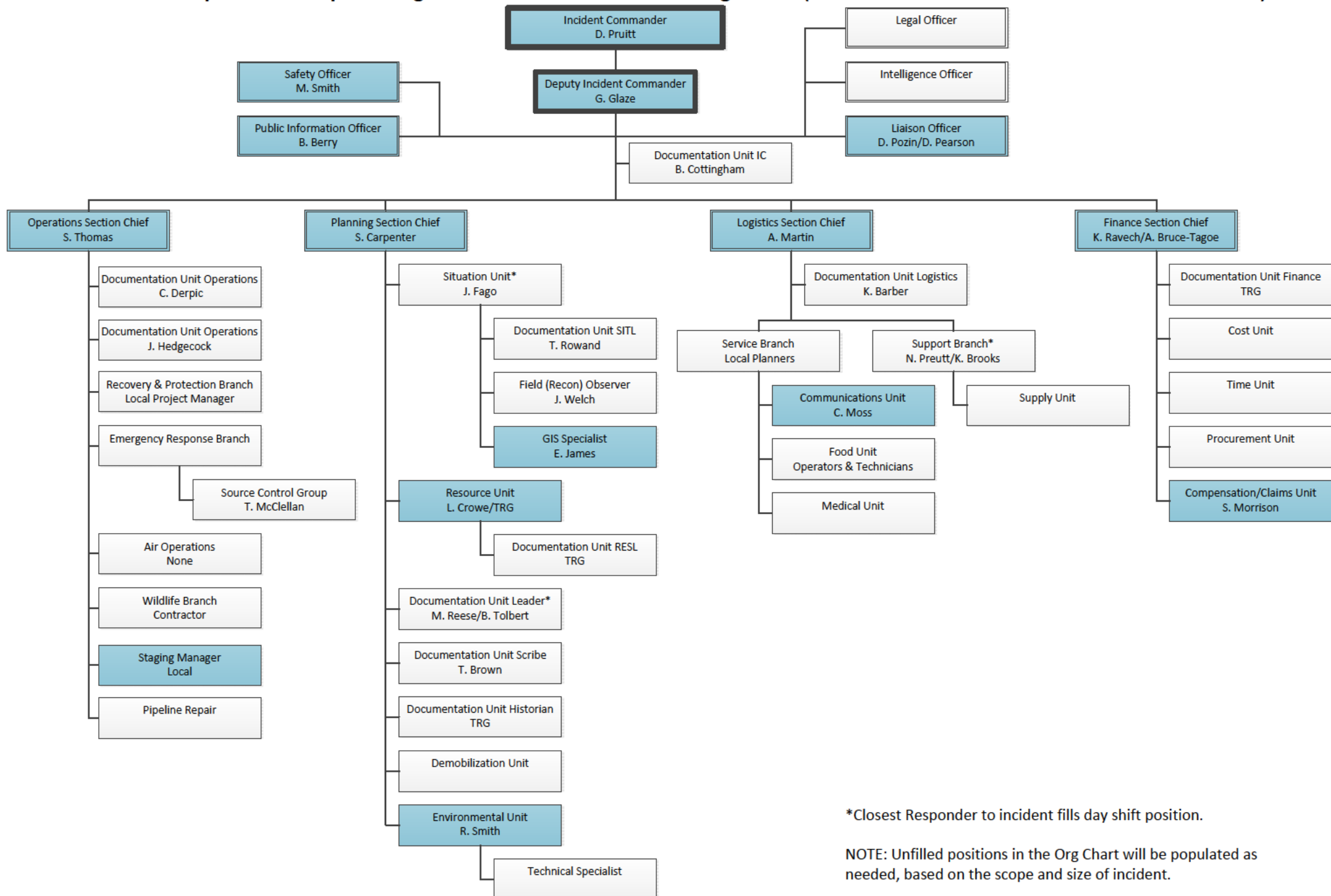
\*Closest Responder to incident fills day shift position.

NOTE: Unfilled positions in the Org Chart will be populated as needed, based on the scope and size of incident.



## Colonial Pipeline Company INCIDENT COMMAND SYSTEM AND STRUCTURE

### Northeast Response Zone Spill Management Team with Strike Team-Night Shift (Strike Team Positions Identified in Shaded Boxes)



\*Closest Responder to incident fills day shift position.

NOTE: Unfilled positions in the Org Chart will be populated as needed, based on the scope and size of incident.



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMON ICS RESPONSIBILITIES

<b>COMMON RESPONSIBILITIES FOR ALL ICS POSITIONS</b>	
Responsibilities	
	Receive assignment from your agency, including:
	<ul style="list-style-type: none"> <li>• Job assignment (e.g., Strike Team designation, position, etc.)</li> <li>• Brief overview of type and magnitude of incident</li> <li>• Travel instructions including reporting location &amp; response time</li> <li>• Any special communications instructions (e.g., travel, radio frequency)</li> <li>• Monitor incident related information from media, internet, etc., if available</li> <li>• 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</li> <li>• Inform others as to where you are going and how to contact you</li> <li>• Review Colonial Incident Management Handbook</li> <li>• Take advantage of available travel to rest prior to arrival</li> </ul>
	Upon arrival at the incident, check-in at the designated check-in location. Check-in may be found at any of the following locations:
	<ul style="list-style-type: none"> <li>• Incident Command Post (ICP), Base/Camps, Staging Areas, Helibases</li> </ul>
	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



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMON ICS RESPONSIBILITIES

	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 coworkers 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
	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 - DUPUTY 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 201-5/1208) 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:
	<ul style="list-style-type: none"> <li>• Health and safety hazard analysis for each site task or operation using the Work</li> </ul>



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

	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

<b>PUBLIC INFORMATION OFFICER - PIO</b>	
<b>Responsibilities</b>	
<p>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.</p>	
<b>Checklist</b>	
<input type="checkbox"/>	Review Common Responsibilities.
<input type="checkbox"/>	Determine from the IC if there are any limits on information release.
<input type="checkbox"/>	Obtain briefing from the Incident Commander.
<input type="checkbox"/>	Develop material for use in media briefings.
<input type="checkbox"/>	Develop a local media list.
<input type="checkbox"/>	Obtain IC/UC approval of media releases.
<input type="checkbox"/>	Prepare prompt and informative news releases to inform the public and conduct media briefings.
<input type="checkbox"/>	Prepare letters for door to door distribution.
<input type="checkbox"/>	Update employees through E-Mail/bulletins.
<input type="checkbox"/>	Arrange for tours and other interviews or briefings that may be required.
<input type="checkbox"/>	Establish and maintain a Joint Information Center as necessary.
<input type="checkbox"/>	Implement applicable ACP JIC/PIO policies and procedures.
<input type="checkbox"/>	Obtain media information that may be useful to incident planning.
<input type="checkbox"/>	Maintain current information summaries and/or displays on the incident and provide information on the status of the incident to assigned personnel.
<input type="checkbox"/>	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
<input type="checkbox"/>	Brief Command on PIO issues and concerns.
<input type="checkbox"/>	Monitor incident status to maintain current knowledge of events and progress.
<input type="checkbox"/>	Monitor media for accuracy, correct as necessary.
<input type="checkbox"/>	Have debriefing session with the IC prior to demobilization.
<input type="checkbox"/>	Complete Media Contact and Community Inquiry reports as necessary.
<input type="checkbox"/>	Utilize consultants handling media and community relations.
<input type="checkbox"/>	Maintain Individual Log (ICS 214a).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

<b>LIAISON OFFICER - LNO</b>	
<b>Responsibilities</b>	
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.	
<b>Checklist</b>	
	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 is 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 from 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.



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

	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
	<b>DOT COMPLIANCE</b>
	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

<b>LEGAL OFFICER*</b>	
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 <sup>1</sup> .	
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.

<sup>1</sup> 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

<b>INTELLIGENCE/SECURITY OFFICER - INTO</b>	
<b>Responsibilities</b>	
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.	
<b>Checklist</b>	
	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 & 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



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST FINANCE SECTION

	• 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.
	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

<b>COST UNIT LEADER – COST</b>	
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	
<input type="checkbox"/>	Review Unit Leader Responsibilities.
<input type="checkbox"/>	Obtain a briefing from the Finance Section Chief.
<input type="checkbox"/>	Coordinate with business unit/organization management on cost reporting procedures
<input type="checkbox"/>	Collect and record all cost data.
<input type="checkbox"/>	Develop incident cost summaries.
<input type="checkbox"/>	Prepare resources-use cost estimates for the Planning Section.
<input type="checkbox"/>	Make cost-saving recommendations to the Finance Section Chief.
<input type="checkbox"/>	Ensure all cost documents are accurately prepared.
<input type="checkbox"/>	Maintain cumulative incident cost records.
<input type="checkbox"/>	Complete all records prior to demobilization.
<input type="checkbox"/>	Provide reports to the Finance Section Chief.
<input type="checkbox"/>	Maintain Individual/Unit Log (ICS 214a/214).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST FINANCE SECTION

<b>TIME UNIT LEADER – TIME</b>	
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

<b>PROCUREMENT UNIT LEADER – PROC</b>	
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

<b>COMPENSATION/CLAIMS UNIT LEADER – COMP</b>	
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 & 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 & 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 shutdown.
	Ensure Site Safety and Health plan (including O <sub>2</sub> , 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 & 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



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	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.
	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.



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	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/disassemble 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).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

### **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 the 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).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

### **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 <sub>2</sub> 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 |



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## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	of oxygen levels is necessary during this process due to nitrogen and CO <sub>2</sub> 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.
	Backwelding procedures requiring entry into an open pipeline are not permitted.
	Update Operations on activities and progress as necessary.
	Ensure the repair of the pipeline/equipment is performed in accordance with applicable industry/ governmental standards.
	Insure that affected pipeline segment is not disturbed until authorized.
	Insure 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.
	Insure 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.).
	Insure that an emergency 1-call is made and properly documented.
	Insure that any adjacent rectifiers have been deactivated.
	Insure 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.
	Insure Site Safety and Health plan completed for site including O <sub>2</sub> , TPH and LEL readings.
	Insure that all Colonial employees wear their Colonial ID Badge on the exterior of their clothing.
	Insure that all personnel at the site have the appropriate Hazwoper training and



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	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).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

### **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. Insure 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).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

<b>WILDLIFE BRANCH DIRECTOR</b>	
Responsibilities	
<p>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.</p>	
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.
	<b>RECOVERY</b>
	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).
	<b>REHABILITATION</b>
	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.



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	Coordinate transport of wildlife to other facilities.
	Coordinate release of recovered wildlife.
	Implement demobilization plan.
	Maintain Individual/Activity log (ICS Form 214a).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

<b>STAGING AREA MANAGER – STAM</b>	
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 & 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



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	• Convenient to recovery sites
	• Size to accommodate large amounts of equipment & supplies
	• Access to food and lodging
	Develop and implement traffic control plan
	• Establish entrance checkpoint
	• Establish exit checkpoint
	Directions
	• 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



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	• 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 & 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
	• 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).



# Colonial Pipeline Company

## 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                                  |



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

	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.
	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).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

### **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, & 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 & 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 and 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, & 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).



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

### **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 & 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.



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## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

	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 PLANNING SECTION

### **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 & 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 & division segments
	• Request initial trajectory
	a) 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/fate data from NOAA 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



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

	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 PLANNING SECTION

### **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 & Situation Unit.
--	--

	Arrange spill observations / overflights as needed, including night infrared photography. Coordinate with SITL & 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 PLANNING SECTION

### **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 & 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 & 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, other.

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



## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST

### PLANNING SECTION

Updated December 2012



# 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 & 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: <ol style="list-style-type: none"> <li>1. General information section</li> <li>2. Responsibilities section</li> <li>3. Release priorities</li> <li>4. Release procedures</li> <li>5. Demobilization Checkout form ICS 221</li> <li>6. Directory.</li> </ol>
	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 off-site).
	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 & 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.



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

	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 & Staging Manager regarding ordered/en-route resources.
	Review IAP & 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.
	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

<b>SERVICES BRANCH DIRECTOR - SVBD</b>	
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

<b>COMMUNICATIONS UNIT LEADER - COML</b>	
<b>Responsibilities</b>	
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.	
<b>Checklist</b>	
	Review Common & 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:
	<b>Incident Command Center</b>
	• 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.
	<b>Staging/Logistics</b>
	• 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
	• Utilize portable radio and/or cellular phone if there is adequate reception



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

	• 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
	<b>Oil Containment/Recovery Sites</b>
	• 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
	<b>Ground Recon</b>
	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
	<b>Aerial Recon</b>
	• 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.
	<b>Public Affairs/ROW Claims</b>
	• 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.



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

	Recover equipment from Units being demobilized.
	Maintain Individual/Activity Log (ICS Form 214a)



# Colonial Pipeline Company

## INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

<b>FOOD UNIT LEADER - FDUL</b>	
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

<b>MEDICAL UNIT LEADER - MEDL</b>	
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**

<b>SUPPORT BRANCH DIRECTOR - SUBD</b>	
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

<b>SUPPLY UNIT LEADER – SPUL</b>	
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.



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## **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 thru 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**



# Colonial Pipeline Company

- 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 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?



# Colonial Pipeline Company

- 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 3<sup>rd</sup> 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?



# Colonial Pipeline Company

- 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



# Colonial Pipeline Company

## ***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?



# Colonial Pipeline Company

## **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 \_\_\_\_

I certify that the spill response qualifies for credit for the exercises and plan components identified above.

\_\_\_\_\_  
Incident Commander

\_\_\_\_\_  
Date

2/19/10



**SPILL MANAGEMENT TEAM (SMT) PHONE LIST**

Name	District	Section / Unit	Strike Team?	Primary Within Their District?	Primary Outside Their District?	Work Phone	Home Phone	Cell Phone
<b>Command Staff</b>								
Glaze, Greg	GCD	Incident Command	x	x		409-291-5645	(b) (6)	
Pruitt, Darren	SED	Incident Command	x	x		336-339-1280		
Beck, Gerald	NED	Incident Command	x	x		443-504-4339		
Barnes, Steve	NED	Incident Command	x	x		732-734-2060		
O'Brien, Ricky	GCD	Command Staff - Safety	x	x		225-223-5193		
Livingston, Andrew	SED	Command Staff - Safety	x	x		678-762-3555		
Smith, Brian	NED	Command Staff - Safety	x	x		703-517-3051		
Smith, Mike	Corp	Command Staff - Safety	x			770-732-6868		
Sims, Carole	Corp	Command Staff - Legal	x			678-762-2393		
<b>District Management (Deputy ICs)</b>								
Wolfe, Adam	GCD-TX	IC				409-291-5644		
White, Carroll	GCD-LA	IC				225-570-3012		
Kirk, Denise (AOM)	GCD-LA	IC				225-570-3015		
Gibbons, Troy	SED-AL/TN	IC				205-685-6001		
West, Robert	SED-GA	IC				770-819-3552		
Cutting, Mike	SED-SC/NC	IC				336-931-6023		
Daniel, Todd	SED-NC	IC				336-931-6027		
Allen, Trent	NED-VA	IC				757-545-7004		
Gallo, Frank	NED-MD	IC				410-970-2150		
Gentzler, John	NED-NJ (WBJ)	IC				856-202-4068		
Kressley, Allen	NED-NJ (LIN)	IC / STAM				732-734-2050		
Curtis, Richard (AOM)	NED-NJ (LIN)	IC				732-734-2059		
<b>Liaison Officer</b>								
Taylor, Mac	Corp	Command Staff - LNO	x	x	x	678-762-2872		
Pearson, David	Corp	Command Staff - LNO	x	x	x	678-762-2634		
Piazza, Mark	Corp	Command Staff - LNO	x			678-762-2531		
McKay, Kevin	GCD	Command Staff - LNO	x			601-765-9168		
Hedgecock, James	SED	Command Staff - LNO	x			336-931-6044		
Smith, Amara	NED	Command Staff - LNO	x			410-970-2157		
Barnard, Sarah	Corp	Command Staff - LNO				678-762-2251		
Schafer, Maggie	Corp	Command Staff - LNO				678-762-2316		
Geis, Alan	Corp	Command Staff - LNO				678-762-2657		
Husband, Jessie	Corp	Command Staff - LNO				678-762-2349		
Tylinski, Jonathan	Corp	Command Staff - LNO				678-762-2615		
<b>Public Information Officer</b>								
Berry, Bill	Corp	Command Staff - PIO	x	x	x	678-762-2542		
Pozin, Don	Corp	Command Staff - PIO	x	x	x	678-762-2592		
Gardner, Don	Corp	Command Staff - PIO	x			678-762-2559		
York, David	Corp	Command Staff - PIO	x			678-762-2568		
Nodzak, Kelly	Corp	Command Staff - PIO	x			678-762-2429		
Harrington-Burns, Dona	Corp	Command Staff - PIO	x			678-762-2250		
Chanthaphonh, Eddy	Corp	Command Staff - PIO	x			678-762-2440		
Younker, Ron	Corp	Command Staff - PIO				678-762-2484		
<b>Operations</b>								
Conkle, Barry	GCD	Operations	x	x		601-765-9173		
Senger, Paul	NED	Operations	x	x		856-381-4675		
Thomas, Stephen	SED	Operations	x	x		336-931-6022		
<b>Staging</b>								
Peeler, David (OM)	GCD-MS	Staging Area Director	x	x	x	601-765-9160		
<b>Planning</b>								
Cervino, Tom	Corp	Planning	x	x	x	678-762-2217		
Titus, Jeff	Corp	Planning	x	x	x	678-762-2231		
Verdon, Mike	Corp	Planning	x			678-762-2873		
<b>Environmental Unit</b>								
Richards, Jeff	SED	Environmental Unit	x	x		423-240-9166		
Smith, Randy	GCD	Environmental Unit	x	x		601-765-9174		
Carpenter, Stan	NED	Environmental Unit	x	x		856-381-4683		
<b>Situation Unit</b>								
Broussard, Mark	GCD	Situation Unit				225-570-3016		
Peters, John	GCD	Situation Unit				601-765-9183		
Williams, Mike	SED	Situation Unit				205-685-6007		
Wyatt, John	SED	Situation Unit				770-819-3561		
Culbreath, John	SED	Situation Unit				704-399-5259		
Leigh, Faron	SED	Situation Unit				336-294-9737		
Napier, Megan	NED	Situation Unit				804-375-3268		
Fago, John	NED	Situation Unit				856-202-4070		



**SPILL MANAGEMENT TEAM (SMT) PHONE LIST**

Name	District	Section / Unit	Strike Team?	Primary Within Their District?	Primary Outside Their District?	Work Phone	Home Phone	Cell Phone
Shenk, Rob	NED	Situation Unit				410-970-2126	(b) (6)	
James, Eric	Corp	GIS	x	x	x	678-762-2862		
McChesney, Paul	Corp	GIS	x	x	x	678-762-2406		
Eldridge, Roger	Corp	GIS	x	x	x	678-762-2210		
Resource Unit								
Sisk, Perry	Corp	Resources Unit	x	x	x	404-558-0650		
Crowe, Lamar	Corp	Resources Unit	x	x	x	678-762-2259		
Troupe, Terry	Corp	Resources Unit				678-762-2518		
Dooley, Scott	Corp	Resources Unit				678-762-2438		
Plishka, Michael	Corp	Resources Unit				678-333-3624		
Williams, Erika	Corp	Resources Unit				678-762-2242		
Morgan, Brett	Corp	Resources Unit				678-762-2783		
Documentation Unit								
Smith, Belinda	GCD	Documentation Unit	x	x	x	225-570-3010		
Cottingham, Brandi	SED	Documentation Unit	x	x	x	336-931-6026		
Needham, William	NED	Documentation Unit	x	x	x	856-628-6175		
Arnold, Terri	SED	Documentation Unit				770-819-3551		
Brown, Tom	SED	Documentation Unit				336-541-0171		
Carnes, Michelle	GCD	Documentation Unit				409-291-5642		
Fortune, Angela	NED	Documentation Unit				804-672-3077		
Jones, Dawn	Corp	Documentation Unit				678-762-2275		
Jones, Eric	NED	Documentation Unit				540-947-2651		
Langley, Denise	NED	Documentation Unit				410-970-2153		
Brashier, Ann	GCD	Documentation Unit				601-765-9170		
Morgan, Patrece	Corp	Documentation Unit				678-232-9116		
Perrin, Robert	NED	Documentation Unit				804-375-3907		
Stegall, Chris	GCD	Documentation Unit				409-291-5647		
Tinsley, Marie	GCD	Documentation Unit				409-291-5642		
Tolbert, Becky	NED	Documentation Unit				804-375-3329		
Logistics								
Brown, Buddy	Corp	LOG	x	x	x	678-762-2481		
Martin, Andy	Corp	LOG	x	x	x	678-762-2245		
Preuett, Norm	GCD	LOG	x			225-241-0288		
Peltier, Glenn	GCD	LOG	x			409-227-4365		
Brooks, Keith	SED	LOG	x			770-819-3556		
Mardre, Mari	Corp	Communications Unit	x	x	x	678-762-2730		
Moss, Christopher	Corp	Communications Unit	x			678-762-2267		
Booth, Dane	Corp	Communications Unit				678-762-2825		
Wisniewski, William	NED	Communications Unit				856-202-4047		
Finance								
Bruce - Tagoe, Aubrey	GCD	Finance	x	x		832-279-4560		
Ravech, Kim (AOM)	SED-NC	Finance	x	x		336-931-6060		
Peacock, Lauren	NED	Finance	x	x		856-381-4677		
Morrison, Skip	Corp	ROW/Claims	x	x	x	678-762-2318		
Gross, Tim	NED	ROW/Claims	x	x	x	804-672-3077		
Centeno, Jennifer	NED	ROW/Claims				732-734-2051		
West, Tom (William)	SED	ROW/Claims				336-931-6039		
Sinclair, Duncan	Corp	ROW/Claims				678-762-2381		
Corporate Office Management								
Adams, Joe	Corp	CCOM				678-762-2263		
Armstrong II, Harvey (Sonny)	Corp	CCOM				770-851-0854		
Baker, Steve	Corp	Director - Communications				678-762-2589		
Barbeauld, Rob	Corp	CMT Leader back-up				678-762-2841		
Barimo, Ken	Corp	Control Center Leader				678-762-2266		
Belden, Doug	Corp	CMT Leader				678-762-2498		
Brooks, Eve	Corp	Human Resources				678-762-2307		
Brown, David	Corp	CCOM				678-762-2346		
Dague, Kevin	Corp	CCOM				678-762-2263		
Doudna, David	Corp	Finance				678-762-2354		
Felt, Tim	Corp	President				678-762-2235		
Lackey, Meredith	Corp	Legal				678-762-2763		
Mobley, Brock	Corp	CCOM				678-762-2263		
Nguyen, Anh	Corp	Hydraulics SME				678-762-2363		
Reese, Ray	Corp	HSS Leader				678-762-2434		
Tompkins, Charley	Corp	Hydraulics SME				678-762-2791		

Primaries must contact Control Center within 15 minutes of receiving Group 4



## **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.



To Initiate Northeast District Emergency Response Group 8

Alpharetta: 800-925-7473 or 678-762-2200

Use Outlook Email Group: ER\_Group8\_NED\_ALL

**Health, Safety, Security & Environmental**

Name and Title	Location	Work	Cell	FAX	Home
Cervino, Tom (Environmental Coordinator)	Alpharetta	678-762-2217	(b) (6)	678-762-2464	(b) (6)
Titus, Jeff (Emergency Response Prog Spclst)	Alpharetta	678-762-2231			
Reese, Ray (Safety & Security Leader)	Alpharetta	678-762-2434		678-762-2465	
Smith, Brian (Safety Coordinator)	Chantilly	703-517-3051		703-830-3860	

**Directors of Operations / Associate Director of Operations**

Name and Title	Location	Work	FAX
Barimo, Ken (Control Center Leader)	Alpharetta	678-762-2266	678-762-2576
Barnes, Steve (Associate Director of Operations)	Linden	732-734-2060	732-726-1943
Beck, Gerald (Northeast Director of Operations)	NED Office	856-381-4684	856-381-4788
Glaze, Greg (Gulfcoast Director of Operations)	Beaumont Warehouse	409-291-5645	409-842-6405
Pruitt, Darren (Southeast Director of Operations)	Greensboro Jct	336-931-6025	336-931-6068

**Business Manager/Human Resources Manager**

Name and Title	Location	Work	FAX
Davies, Susan (Human Resources Mgr)	NED Office	856-381-4681	856-381-4788
Peacock, Lauren (Business Manager)	NED Office	856-381-4677	856-381-4788

**Compliance**

Name and Title	Location	Work	FAX
Smith, Amara (NED)	Dorsey	410-970-2157	770-754-8036

**Operations Managers/Associate OM's**

Name and Title	Location	Work	FAX
Allen, Trent (Operations Manager)	Norfolk	757-543-0410	757-545-7503
Gallo, Frank (Operations Manager)	Dorsey	410-970-2150	
Gentzler, John (Operations Manager)	Woodbury	856-202-4068	856-384-5739
Kressley, Al (Operations Manager)	Linden	732-956-4643	
Curtis, Richard (Associate Operations Manager)	Linden	732-734-2059	

**Engineers & Subject Matter Experts**

Name and Title	Location	Work	FAX
Gibson, Jeff (Electrical Staff Engineer)	NED Office	856-381-4679	
Warehime, Earl (Measurement Specialist)	Dorsey	410-970-2122	410-970-2151
Johnson, Eric (Measurement Specialist)	NED Office	856-381-4685	856-381-4788
Towns, Galen (Field Controls Staff Engineer)	Richmond Warehouse	804-672-2718	
Wisniewski, William (Field Controls Staff Engineer)	Woodbury	856-202-4047	732-726-1943



Zeledon, Julio (Mechanical Staff Engineer)

Dorsey

770-825-7601

**ROW Coordinator**

Name and Title	Location	Work
Gross, Tim (ROW Manager)	Richmond Whse.	804/672-3077 x8 or Cisco 6937

FAX

**Administrative Assistants**

Name	Location	Work
Centeno, Jennifer	Linden	732-734-2051
Johnson, Denise	Dorsey	410-970-2153
Fortune, Angela	Richmond Warehouse	804-672-3077
Ognissanti, Patricia	NED Office	856-381-4678
Thomas, Rebecca	Woodbury	856-202-4073

FAX

410-549-6410

770-825-7817

856-384-5739

**Project Leaders/Project Managers**

Name and Title	Location	Work
Garvey, Tyson (Associate Project Manager)	Linden	732-734-2039
Herbstritt, Greg (Project Manager)	NED Office	856-381-4680
McClellan, Todd (Project Manager)	Dorsey	410-970-2141
Jackson, Fred (Project Manager)	Mitchell	804-375-3237
McPeak, Ray (Project Manager)	Dorsey	410-970-2136
Senger, Paul (Project Leader)	NED Office	856-381-4675

FAX

770-754-8432

856-381-4788

410-970-2151

804-375-3901

410-970-2151

**Environmental**

Name and Title	Location	Work
Fago, John (Specialist)	Woodbury	856-202-4070
Kearney, Megan (Technician)	Mitchell	804-375-3268
Shenk, Rob (Specialist)	Dorsey	410-970-2126
Carpenter, Stan (Environmental Manager)	NED Office	856-381-4683

FAX

856-384-5739

770-754-8169

410-549-6410

856-562-4788

**Corrosion**

Name and Title	Location	Work
Stanley, Josh (Corrosion Program Manager)	NED Office	856-381-4686
Gordiany, Omar (Corrosion Technician)	Woodbury	856-202-4056
Derpic, Christopher (Corrosion Technician)	Dorsey	Use Cell#
Walker, John A. (Corrosion Technician)	Richmond	800-435-3214 x16

FAX

770-754-8399

410-970-2151

804-672-3080

**Schedulers**

Name and Title	Location	Work
Desimone, James (Sr. Scheduler)	Linden	732-734-2035
Pelletier, Linda (Sr. Scheduler)	Linden	732-734-2036

FAX

732-750-8841

732-750-8841



**Planners**

Name	Location	Work	Cell	FAX	HOME
Droege, Ken	Mitchell	804-375-3257 or Cisco 3257	(b) (6)	804-375-9147	(b) (6)
Hoffman, Patrick	Linden	732-734-2040		732-855-7510	
Mathis, John	Woodbury	856-202-4069		856-384-5739	
Reese, Melinda	Dorsey	410-970-2128		410-549-6410	



**Inspectors**

Name	Location	Work	Cell	FAX	Home
Andersen, Rob	Woodbury	856-202-4045	(b) (6)	856-384-5739	(b) (6)
Bramowicz, Bill	Linden	732-734-2038		732-726-1624	
Dzendzel, Edward	Norfolk	757-545-7004		757-545-7503	
Garrison, Keith	Fairfax	Use Cell#		703-830-3860	
Gibson, Chris	Richmond	804-233-4347		804-232-3561	
Harris, Ricky	Mitchell	use Cell #		804-375-9147	
Harrod II, Mark	Dorsey	410-970-2149			
Holmgren, Brian	Woodbury				
Lautas, Robert	Woodbury	856-202-4042		856-384-5746	
Libero, Vincent	Linden	732-734-2062		732-726-1624	
Loar, Larry	Fairfax	Use Cell#		703-830-3860	
Lum, Dale	Woodbury	856-202-4055		770-754-8352	
Mullins, Tim	Mitchell	804-375-3359 or Cisco 3359		804-375-9147	
Moore, Scott	Dorsey	410-970-2138		410-970-2151	
Murphy, Todd	Mitchell	use Cell #		804-375-9147	
Perrin, Robert	Mitchell	804-375-3907 or Cisco 3907		770-754-8178	
Rutledge, Todd	Linden	732-734-2037		732-636-3385	
Strauss, Michael	Dorsey	410-970-2143		410-970-2151	
Toth, John	Woodbury	856-202-4042		856-384-5746	
Turner, David	Dorsey	410-970-2137		410-970-2151	
Welch, Jim	Woodbury	856-202-4042		856-384-5746	
Winters, John	Dorsey	410-970-2140		410-970-2151	
Zaun, Dan	Dorsey	410-970-2135		410-970-2151	

**Lead Technicians**

Name	Location	Work	FAX
Hamby, Clint (Lead Technician)	Mitchell	804-375-3365 or Cisco 3365	804-375-9147
Hopwood, Todd (Lead Technician)	Dorsey	410-970-2123	410-549-6410
Kane, Matt (Lead Technician)	Linden	732-734-2041	732-855-7510
Small, John J. (Lead Technician)	Woodbury	856-202-4060	856-384-5739

**Technicians/ Associate Techs**

Name and Title	Location	Work	FAX
Birckhead, Kevin	Mitchell	804-375-3390 or Cisco 3390	804-375-9147
Crisitello, Allen	Linden	732-734-2044	732-855-7510
Cornelissen, Rick	Norfolk	757-543-5937	757-545-7503
DaRocha, Janior	Linden	732-734-2042	732-855-7510
Eichman, Jim	Woodbury	856-202-4065	856-384-5739
Freeze, Jim (Associate Technician)	Dorsey	410-970-2147	410-549-6410
Setser, Thomas (Associate Technician)	Woodbury	856-202-4048	856-384-5746
Trieble, Thomas (Associate Technician)	Woodbury	856-845-2305	







**Technicians/ Associate Techs Cont'd**

Name and Title	Location	Work	Cell	FAX	Home
Bruguier, Desmond (Associate Technician)	Linden	732-734-2060	(b) (6)		(b) (6)
Faber, Chris (Associate Technician)	Linden	732-734-2054			
Gomez, Didier	Woodbury	856-202-4058		856-384-5739	
Heater, Willie	Dorsey	410-970-2121		410-549-6410	
Hess, Jr., Rodman	Woodbury	856-202-4067		856-384-5739	
Infante, Nick	Linden	732-734-2043		732-855-7510	
Johnson, David	Mitchell	804-375-3364 or Cisco 3364		804-375-9147	
La, Brandon	Fairfax	703-323-0025 x.112		703-323-6926	
Lightfoot, A.C.	Mitchell	804-375-3362 or Cisco 3362		804-375-9147	
Marino, Nick (Associate Technician)	Linden	732-734-2061			
McFaden, Sean	Richmond	804-672-3077 x2 or Cisco x 6933		804-672-3080	
Mead, Stan	Dorsey	410-970-2124		410-549-6410	
Merrit, Gilbert	Richmond	804-672-3077 x 3 or Cisco 6939		804-672-3080	
Ricart, Luis (Associate Technician)	Linden	732-734-2046			
Robertson, Andy	Dorsey	410-970-2125		410-549-6410	
Sullivan, Terry	Norfolk	757-545-7004		757-545-7503	
Trieble, Tom (Associate Technician)	Woodbury	856-845-2305			
Truini, Sam	Mitchell	804-375-3328 or Cisco 3328		804-375-9147	
Vreeland, Clyde	Fairfax	703-323-0025 x 108		703-323-6926	
Wade, Steve (Associate Technician)	Woodbury	856-202-4061		856-384-5739	
Whitefield, Thomas	Dorsey	410-970-2144		410-549-6410	
Young, Garvey	Mitchell	804-375-3327 or Cisco 3327		804-375-9147	

**Lead Operators**

Name	Location	Work	FAX
Cotterman, Chip	Dorsey	410-970-2127	410-549-6410
Jolley, Paul	Fairfax	703-323-0025 x 113	703-323-6926
Posey, Greg	Richmond	804-233-4335	804-232-3561
Rowand, Todd	Woodbury	856-202-4066	
Stewart, Greg	Linden	732-734-2034	732-734-2048
Tolbert, Becky	Mitchell	804-375-3329 or Cisco 3329	804-375-9147

**Senior Operators**

Name	Location	Work	FAX
Burkart, Bud	Fairfax	703-323-0025 x.109	703-323-6926
Cerchiaro, Ed	Woodbury	856-202-4041	856-384-5746
Chambers, Rich	Norfolk	757-545-7004	757-545-7503
Clay, Conrad	Fairfax	703-323-0025 x.115	703-323-6926
Collins, Emory "Buzz"	S. Baltimore	410-355-8155	410-354-6319



**Senior Operators Cont'd**

Name	Location	Work	Cell	FAX	Home
Kupina, Jr., Mike	S. Baltimore	410-879-2260	(b) (6)	410-879-7056	(b) (6)
McAleer, Ron	Woodbury	856-845-8742		856-384-5739	
Miller, Harold	Fairfax	703-323-0025		703-323-6926	
Miller, Jim	Woodbury	856-202-4042		856-384-5746	
Mongeau, Pete	Linden	732-734-2049		732-734-2048	
Morillo, Fred	Linden	732-734-2055		732-734-2048	
Pride, Jeff	Richmond	804-672-3077		804-232-3561	
Ringel, Mark	Mitchell	804-672-3077			
Roenker, Tim	Norfolk	757-545-7004		757-545-7503	
Russo, Mark	Fairfax	703-323-0025 x.115		703-323-6926	
Scott, Doug	S. Baltimore	410-355-8155		410-354-6319	
Strennen, Greg	S. Baltimore	410-355-8155		410-354-6319	
Taylor, Jason	Fairfax	703-323-0025		703-323-6926	

**Operators**

Name and Title	Location	Work	FAX
Alt, Kevin (B)	Dorsey	410-970-2131	410-549-6410
Barber, Kyle (A)	Dorsey	410-970-2130	410-549-6410
Black, Keith (Associate)	Dorsey	410-970-2131	410-549-6410
Blizzard, James (Associate)	Dorsey		
Blumenfeld, Jeff (A)	Roanoke	540-947-2651	540-947-5015
Burgess Jr., Warner Randall (Assocait)	Richmond		
Calder, Robert (A)	Roanoke	540-947-2651	540-947-5015
Cerami, Joe (Associate)	Linden		
Czuba, John (B)	Woodbury	856-202-4042	856-384-5746
Defilippo, Sal (A)	Linden	732-734-2031	732-750-8841
Dimeglio, Louis (A)	Linden	732-734-2031	732-750-8841
Fabrick, Dave (A)	Dorsey	410-879-2260	410-354-6319
Glacken III, Charles (Associate)	Dorsey	410-970-2131	
Goodwin, Stephen (A)	Linden	732-734-2031	732-750-8841
Hall, Chris (A)	Dorsey	410-970-2130	410-549-6410
Hazlegrove, Guy (A)	Mitchell	804-375-3257 or Cisco 3257	804-375-9147
Helinsky, Joseph (B)	Woodbury	856-202-4042	856-384-5746
Houpt, Rich (A)	Woodbury	856-202-4042	856-384-5746
Hudson, Joseph (A)	Linden	732-734-2031	732-750-8841
Huse, Andy (B)	Dorsey	410-970-2131	410-549-6410
Johnson, John (B)	Linden	732-734-2031	732-750-8841
Jones, Eric (A)	Roanoke	540-947-2651	540-947-5015
Kline, Eric (B)	Dorsey	410-970-2130	410-549-6410

**Operators Continued**

Name and Title	Location	Work	Cell	FAX	Home
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Kressley, Doug (B)	Woodbury	856-516-0041	(b) (6)	(b) (6)
MacConchie, Kenneth (B)	Linden	732-734-2031		732-750-8841
Melton, Jonathan (B)	Mitchell	804-375-3257 or Cisco 3257		804-375-9147
Meritt, Ryan (Associate)	Mitchell	804-375-3257 or Cisco 3257		804-375-9147
Morris, Brandon (A)	Mitchell	804-375-3257 or Cisco 3257		804-375-9147
Needham, Bill (B)	Woodbury	856-202-4042		856-384-5746
Newell, Peter (Associate)	Linden			
Powitz, George (Associate)	Woodbury	856-202-4042		856-384-5746
Paronto III, Howard (Associate)	Linden			
Pullen, Sharon (A)	Woodbury	856-202-4041		856-384-5746
Randolph, Jeff (Associate)	Richmond	804-233-4335		804-232-3561
Rodriguez, Erick (Associate)	Linden	732-734-2031		
Rodriguez, Michael (B)	Linden	732-734-2031		732-750-8841
Santos, Olinda (A)	Linden	732-734-2031		732-750-8841
Scali, Paul (Associate)	Linden	732-734-2031		
Scott, Bryan (Associate)	Woodbury			
Shannon, Edward (B)	Linden	732-734-2031		732-750-8841
Sleeth, Bob (A)	Woodbury	856-202-4041		856-384-5746
Snoddy, Sam (B)	Mitchell	804-375-3257 or Cisco 3257		804-375-9147
Steinert, Stephen (B)	Dorsey	410-970-2131		410-549-6410
Stinson, Steve (A)	Mitchell	804-375-3257 or Cisco 3257		804-375-9147
Strine, Mike (A)	Dorsey	410-970-2130		410-549-6410
Toms, Thomas (A)	Roanoke	540-947-2651		540-947-5015
Ventimiglia, Anthony (Associate)	Linden	732-734-2031		732-750-8841
Williams, Rodney (A)	Mitchell	804-375-3257 or Cisco 3257		804-375-9147

#### Satellite Phones

ID Name	Location	Phone Number	Custodian
18	Mitchell	(b) (6)	Clint Hamby
	Mitchell		Clint Hamby
19	Richmond		Sean McFaden
20	Fairfax		Brandon La
21	Dorsey		Willie Heater
	Dorsey		Jim Freeze
22	Woodbury		Jim Eichman
23	Linden		Matt Kane
24	Woodbury		Jim Eichman
25	Woodbury		Jim Eichman
26	Norfolk		Trent Allen

\* Indicates an unlisted phone number



FEDERAL AGENCIES		TELEPHONE
National Response Center (DOT & US Coast Guard)		800-424-8802
U.S Coast Guard – Activities (Baltimore)	Officer-On-Duty	410-576-2525 or 2693
EPA Region 3 (VA, PA, MD, DE, WV, DC)		215-814-9016
US Dept. of Labor/Federal OSHA	After Hours	410-865-2055 or 800-321-6742
Emergency Responder – Maryland – Sector Baltimore		
Captain Kevin Kiefer – Captain USCG Sector Baltimore		410-576-2561
LCDR Rick Armstrong – Chief, Incident Management Division		410-576-2654
LT Jasmin Mau – Contingency Planning and Force Readiness		410-576-2628

Updated April 2013



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

COUNTY AGENCIES	TELEPHONE
<b>Carroll County, MD</b>	
Carroll County Hospital Center – Westminster, MD	410-848-3000
Fire Marshal	410-552-0154
Hampstead Police Department	410-239-8954
Manchester Police Department	410-239-6900
Sykesville Police Department	410-795-0757
Taneytown Police Department	410-751-1150
Westminster Police Department	410-848-4646
<b>Baltimore, MD</b>	
Franklin Square Hospital	443-777-7000
Harbor Hospital	410-350-3200
Fire Department	410-887-4500
Police Department	410-887-2222
<b>Harford County, MD</b>	
SARA Title III Coordinator/Reporting	410-638-4900
Environmental Enforcement Unit	410-638-4900
Upper Chesapeake Medical Center	443-643-1000
<b>Howard County, MD</b>	
Howard County Hospital – Columbia, MD	410-740-7890
Fire & Rescue	410-313-6000
Police Department	410-313-3200
<b>Fairfax County, VA</b>	
Fire Dept.	703-246-2546
Police Dept. 24HR	703-691-2131
Emergency Services Coordinator	540-582-7037
<b>Prince William, VA</b>	
Prince William Hospital	703-369-8000
Police	703-792-6500
Fire & Rescue	703-792-6810
Sheriff	703-792-6070
<b>Fredericksburg, VA</b>	
Fredericksburg Fire Dept.	540-372-1059/1061

CITY AGENCIES	
<b>Bull Run, VA</b>	
Family Practice	703-368-3161
Fire & Rescue	703-257-8458
Fire Marshal	703-257-8458
Police Department	703-257-8000
<b>Fairfax, VA</b>	
Fairfax City Fire Dept.	703-385-7940
Fairfax City Police Dept.	703-385-7924
Fairfax Hospital	703-698-1110
Emergency Room (Direct Dial)	703-698-3111



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

### Central Virginia Area

FEDERAL AGENCIES	TELEPHONE
National Response Center (DOT, US EPA & US Coast Guard)	800-424-8802
U.S Coast Guard – Activities (Norfolk)	757-628-4275
EPA Region 3 (VA, PA, MD, DE, WV, DC)	215-814-9016
US Dept. of Labor/Federal OSHA	410-865-2055 or
After Hours	800-321-6742

STATE AGENCIES	TELEPHONE
VA Dept of Environmental Quality <a href="http://www.deq.state.va.us">www.deq.state.va.us</a>	804-698-4000
VA Dept of Emergency Management	24 Hrs 804-674-2400 800-468-8892
VA Dept of Game & Inland Fisheries	804-367-1000
Rick Bush Home	8(b) (6)
VA State Police	757-424-6800
VA State Water Quality Division Director	804-698-4375
VA Dept of Labor & Industry - OSHA	804-786-2377

COUNTY AGENCIES	TELEPHONE
<b>Amherst County, VA</b>	
Amherst County LEPC	County Administrator
	24 Hr
	434-946-9305 434-946-9300
Amherst County Emergency Services	Coordinator
	24 Hr
	434-946-9307 434-946-9300
Amherst County Police	
	Town Police
	Business
	Dispatch
	434-946-5517 434-946-7874 434-946-9381 434-946-9300
<b>Appomattox County, VA</b>	
Appomattox County LEPC	Community Emergency Coordinator
	434-352-8241
Appomattox County Sheriff's Dept.	434-352-8241
Appomattox County Fire Dept.	434-352-5212
Appomattox County Rescue Squad	434-352-5433
<b>Bedford County, VA</b>	
Bedford County LEPC	Public Safety Director
Bedford LEPC	City Manager
Bedford County Sheriff's Dept	24 Hrs
	540-586-7601 540-587-6001 540-586-7827 540-586-4800
<b>Buckingham County, VA</b>	
Buckingham County LEPC	County Administrator
Buckingham County Sheriff, Fire, & Rescue	434-969-4242 434-696-1772



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

### Central Virginia Area

COUNTY AGENCIES		TELEPHONE
<b>Campbell County, VA</b>		
LEPC	County Administrator	434-332-9525
Sheriff's Dept		434-332-9580
Fire Dept.		434-592-9574 434-332-9540
Police		434-332-9580
Lynchburg Police, Fire, and Rescue		434-847-1602
Director of Public Safety	Emergency – 24 Hr	434-332-9540 434-332-9574
<b>Charles City County, VA</b>		
Charles City County LEPC	County Administrator	804-829-2401
<b>Charlotte County, VA</b>		
Charlotte County LEPC	County Administrator	434-542-5117
Charlotte County Sheriff's Office		434-542-5131 434-542-5141
Charlotte County Fire & Rescue	24 Hrs	434-542-5131
Brookneal Police		434-376-2650
<b>Chesapeake County, VA</b>		
Emergency Operations Center		757-382-6464
County Police		757-382-6161
Volunteer Fire Suppression		757-382-6247
Volunteer EMS Auxiliary	Chairman Fire Marshall	757-382-6369 757-382-6566
<b>Chesterfield County, VA</b>		
Chesterfield County LEPC	Asst. Emergency Services Coordinator	804-748-1236
<b>Culpepper County, VA</b>		
Culpeper Joint LEPC	Emerg. Coord. – E. Thomas Williams 24 Hr Pager	540-727-3411 540-727-3400 540-399-2045
<b>Cumberland County, VA</b>		
Cumberland County LEPC	Chairman	804-492-3625
Cumberland County Police, Fire, & Rescue Squad		804-492-4120
<b>Fluvanna County, VA</b>		
Fluvanna County LEPC	County Administrator	434-591-1910
Fluvanna County Sheriff's Office		434-589-8211
Fluvanna Fire Dept	24 Hrs	434-589-8211
<b>Halifax County, VA</b>		
Halifax Fire Dept and Rescue Squad		434-476-3334
Halifax County Joint LEPC	Dir Of Emerg Svcs - Allen Bober Cell	434-476-3300 (b) (6)
Halifax County Sheriff		434-476-3334
<b>Henrico County, VA</b>		
Henrico County Hazardous Incident Team	Captain	804-501-7310



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

### Central Virginia Area

COUNTY AGENCIES		TELEPHONE
<b>Louisa County, VA</b>		
Louisa County LEPC	Emerg. Svcs Coord. – Michael Schlemmer	540-967-3491
	Home	(b) (6)
	Pager	804-418-3062
	Cell	(b) (6)
	County Admin – C. Lee Lintecum	540-967-0401
	Home	(b) (6)
	Cell	
	Fax	540-967-3411
Louisa County Police, Fire, Rescue Squad	24 Hrs	540-967-1234
<b>Orange County, VA</b>		
Orange County LEPC	Emerg. Coord. – R. Duff Green	540-661-5429
	Home	(b) (6)
	Cellular	
Orange County Police, Fire Dept., Rescue	24 Hrs	540-672-1200
<b>Powhatan County, VA</b>		
Powhatan County LEPC	Emergency Services Director	804-598-5646
	24 Hr Dispatch	804-598-5656
<b>Prince Edward County, VA</b>		
Prince Edward Fire Dept		434-392-3332
Prince Edward Rescue	Emergency Coordinator	434-392-3303
LEPC	County Administrator	434-392-8837
Sheriff's Dept		434-392-8101
<b>Surry County, VA</b>		
Surry County LEPC	Emergency Coordinator	757-294-5271
County Police, Fire, and Rescue		757-294-5264
<b>Wight County, VA</b>		
Volunteer Fire Dept – Rushmere		757-357-3207
Volunteer Fire Dept. – Smithfield		757-357-3231
<b>York County, VA</b>		
York County Police & Sheriff's Dept.		757-890-3625
York County Fire Dept. & Rescue Squad		757-890-3621

CITY AGENCIES		TELEPHONE
<b>Newport News, VA</b>		
Newport News Fire Dept. (HAZMAT Team)		757-247-2500
Newport News Water Works	Back Up Dispatcher	757-234-4800/4889 757-888-3382
<b>Richmond, VA</b>		
Richmond LEPC - CEHMC City of Richmond		804-501-5515
<b>Suffolk, VA</b>		
LEPC	Assistant City Mgr	757-923-2110
Police/Fire Dept/Rescue Squad		757-923-2350
Rescue Squad – Bennett's Creek		757-484-7888
Volunteer Fire Dept – Chuckatuck		757-255-4240
<b>James City, VA</b>		
James City Emergency Services		757-566-4309
<b>Williamsburg, VA</b>		
Williamsburg Volunteer Fire & Rescue Squad		757-220-2332



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

### Linden Area

<b>FEDERAL AGENCIES</b>	<b>TELEPHONE</b>
National Response Center (DOT, US EPA & US Coast Guard)	800-424-8802
US Coast Guard Activities – Philadelphia	215-271-4800
EPA Region 3 (VA, PA, MD, DE)	215-814-9016
EPA Region 2 (NJ & NY)	732-548-8730
USCG Sector – Emergency Responders - NY	
Captain Gregory Hitchen	718-354-4002
Commander Linda Sturgis	347-682-0532
Civilian John Hillin +9 additional staff members	718-354-4003

<b>STATE AGENCIES</b>	<b>TELEPHONE</b>
Dept. of the Environment – NY	518-457-7362
Dept. of the Environment - NJ	877-927-6337
Dept. of the Environment – PA	717-787-4343
Dept. of the Environment – MD	866-633-4686
Dept. of the Environment – DE	302-739-5072
One Call – NY	800-272-4480
One Call – NJ	800-272-1000
OSHA – NJ	732-750-3270
	After Hrs 800-321-OSHA
NY Public Svc Commission (Gas, Water, Safety & Reliability – Agents for DOT)	518-474-5453
After Hrs – Call in this order	Brian Kilduff 516-579-0027
	Suresh Thomas 914-738-1494
	Jeffery Kline 518-729-2525
	Steve Blaney 518-477-6640
	Kevin Speicher 315-391-3794
Fire Dept - NY	718-727-1100

<b>COUNTY AGENCIES</b>	<b>TELEPHONE</b>
<b>Mercer County</b> Within the County	911
Sheriff's Office	609-989-6111
Princeton Police Dept.	609-924-4141
State Police - NJ	609-298-1170
<b>Middlesex County</b> Within the County	911
Sheriff's Office – New Brunswick	732-745-3366
Police Dept – Edison	732-287-0700
Rescue Squad – Edison	732-248-7500
State Police – NJ	732-548-2313
Police, Fire, Rescue – Woodbridge, Avenel, Port Reading	732-634-7700
<b>Essex County</b> Within the County	911
Police Dept. – Port Authority	973-589-6321
Fire Dept. – Port Authority	973-733-7400
State Police – Newark, NJ	973-344-1704
Rescue Squad – Ironbound	973-733-7489



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

### Linden Area

<b>COUNTY AGENCIES (Cont'd)</b>		<b>TELEPHONE</b>
<b>Union County</b>	Within the County	911
Sheriff's Office		908-527-4450
Police Dept. – Elizabeth		908-558-2000
Police Dept – Rahway		732-388-1900
Police Dept – Linden		908-474-8500
Fire Dept – Elizabeth		908-820-2800
Fire Dept. – Rahway		732-388-1400
Fire Dept – Linden		908-486-3500
<b>Staten Island</b>		
Police Dept.	(Ask to be transferred to 911 Operator)	646-610-5000
Fire Dept		718-727-1100
St. Vincent's Medical Ctr – Ambulance		718-876-8719

<b>CITY AGENCIES</b>	<b>TELEPHONE</b>
Mayor's Office of Emergency Mgmt – NYC	212-374-5500
Police Dept. – Port Authority of NY – NJ Goethals Bridge	718-390-2502



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

### Woodbury Area

FEDERAL AGENCIES	TELEPHONE
National Response Center (DOT, US EPA & US Coast Guard)	800-424-8802
US Coast Guard Activities – Philadelphia	215-271-4800
EPA Region 3 (VA, PA, MD, DE, WV, DC)	215-814-9016
EPA Region 2 (NJ, NY)	732-906-6907
NY Office	212-637-5000

STATE AGENCIES	TELEPHONE
NY Public Svc Commission (Gas, Water, Safety & Reliability – Agents for DOT) After Hrs – Call in this order	518-474-5453 718-628-9623 718-336-3485 516-483-5959 718-967-1290 518-477-6640 518-370-3930
NY Dept of the Environment	518-457-7362
NJ Dept of the Environment	877-927-6337
PA Dept of the Environment	717-787-4343
MD Dept of the Environment	866-633-4686
NY One Call	800-272-4480
NJ One Call	800-272-1000
PA One Call	800-242-1776
DE One Call	800-282-8555
MD, VA, District of Columbia One Call	800-257-7777
OSHA – NJ	732-750-3270
After Hrs	800-321-OSHA
Delaware River Basin Commission	609-883-9500
Delaware River Emerg. Spill Number (24 hr)	800-662-8802
Within DE	302-739-5072
Outside DE	

COUNTY AGENCIES	TELEPHONE
<b>Chester County</b>	911
Avondale Police Dispatch	610-268-2022
County Police Dept., Fire, & Rescue Squad	610-268-3171
<b>Delaware County, PA</b>	911
Police, Fire Dept & Rescue Squad	610-565-6500
State Police (Media Barracks)	484-840-1000
<b>New Castle County, DE</b>	911
State Police, County Police	302-656-1352
Fire & Rescue	302-656-3930
<b>Salem County, NJ</b>	911
State Police (Woodstown Barracks)	856-769-0774
Fire Dept, Rescue Squad	856-769-1955
Woolrich Township Police	856-467-1667



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

### Woodbury Area

COUNTY AGENCIES (cont'd)		TELEPHONE
<b>Gloucester County, NJ</b>	Within County	911
State Police (Bellmawr Barracks)		856-933-0550
Fire Dept & Rescue Squad		856-589-0911
East Greenwich Police		856-423-4100
West Deptford Police		856-845-2300



## Colonial Pipeline Company

### OTHER FEDERAL, STATE, AND LOCAL AGENCIES

<b>Woodbury Stub Lines – Pennsauken Line</b>	
State Police (Bordentown Barracks)	609-298-1170
Mount Laurel Police	856-234-1414
Maple Shade Police	856-779-7111
Moorestown Police	856-235-0130
Cinnaminson Police	856-829-6666
Woodbury Heights Police	856-845-4003
Deptford Township Police	856-845-2220
<b>Camden County, NJ</b> Within County	911
State Police (Bellmawr Barracks)	856-933-0550
State Police – NJ Turnpike & Parkway	856-235-1000
Runnemede Police	856-939-3354
Runnemede Fire & Rescue	856-783-4808
Barrington Police	856-939-3354
Barrington, Lawnside, & Cherry Hill Fire & Rescue	856-933-1234
Cherry Hill Police	856-665-1200
<b>Burlington County, NJ</b> Within County	911
Burlington County Central Dispatch	609-265-7168
Mount Laurel Police	856-234-1414
Mount Laurel Fire Central Office	856-234-6053
Westhampton, Mansfield Police	609-267-8300
Burlington Police	609-386-1000
Florence Police	609-499-3131
<b>Mercer County, NJ</b> Within County	911
Bordentown Police	609-298-4300
Fire & Rescue – Burlington, Florence, Mansfield, Bordentown	609-267-8300
<b>Woodbury Stub Lines – Paulsboro Line</b>	
State Police ( Bellmawr Barracks)	856-933-0550
Fire & Rescue	856-589-0911
West Deptford Police	856-845-2300
Paulsboro Police	856-423-1101
<b>Woodbury Stub Lines – Girard Point Line in PA</b>	
State Police	610-459-4150
Philadelphia Police, Fire & Rescue	215-238-0911
<b>Woodbury Stub Lines – Girard Point Line in NJ</b>	
State Police (Bellmawr Barracks)	856-933-0550
West Deptford Police	856-845-2300
National Park Police	856-845-1187
Fire & Rescue	856-589-0911

### Woodbury Area



# Colonial Pipeline Company

## OTHER FEDERAL, STATE, AND LOCAL AGENCIES

COUNTY AGENCIES (Cont'd)	TELEPHONE
<b>Woodbury Stub Lines – Eagle Point Line</b>	
State Police	856-933-0550
West Deptford Police	856-845-2300
National Park Police	856-845-1187
Gloucester City Police	856-456-0900
Fire & Rescue, West Deptford, National Park	856-589-0911
Fire & Rescue, Gloucester City	856-456-0900
<b>Woodbury Stub Lines – Pennsauken Line (Cont'd)</b>	
Pensauken Township Police	856-663-1234
Fire & Rescue – Mount Laurel	856-933-1234
Fire & Rescue – Maple Shade	856-779-7333
Fire & Rescue – Moorestown, Cinnaminson, Pennsauken, Burlington County	856-234-1111
<b>Woodbury Stub Lines – Trenton Line</b>	
State Police (Central Dispatch)	609-298-1170
Bordentown Township Police	609-298-4300
Bordentown Fire & Rescue	609-298-1111
Trenton Police, Fire & Rescue	609-989-4170
New Brunswick Police Dept.	732-745-5200
New Brunswick Sheriff's Office 24 Hr	732-745-3271
Sheriff's Office – New Brunswick	732-745-3366



# Colonial Pipeline Company

## OIL SPILL RESPONSE ORGANIZATIONS

### Northeast

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE NUMBERS
Triumvirate Environmental (formerly Perma-Fix) OSRO #0100	1500 Carbon Ave. Baltimore, MD 21226	Craig Childres V.P.	800-404-8037 (24 HR) 410-636-3700 (office) (b) (6) (cell) 410-636-0260 (fax)
	195 Wyche Road Stafford, VA Office	Jamie Usher	540-282-1176 (office)  540-288-1176 (office) 540- 288-1152 (fax)
Clean Harbors Environmental	Corporate Office 42 Longwater Dr. Norwell, MA 02061		800-645-8265 (24 Hrs) 781-792-5000 (Corp. Off.)
	30 Joseph St. Kingston, MA 02364	Scott Metzger	Phone: 781-585-5112 x503 Fax: 781-585-7943
W.E.L. Environmental Services	PO Box 109 Concord, VA 24538	Chris Haywood	800-847-2455 (24 Hrs) Phone: 434-993-2210 Fax: 434-993-2287
	800 Liberty Rd NE Roanoke, VA 24012	Doug Witt	Phone: 540-561-0735 Fax: 540-561-0734
HEPACO	1301 Marsh St. PO Box 1779 Norfolk, VA 23501	Brian Genzler	757-543-5718 800-888-7689 (24 hrs)
	Corporate Office 929 Professional Place Chesapeake, VA	Bob May	757-436-3000 800-989-4467 (24 hrs)
	271 Warrenton Road Fredericksburg, VA	Taylor McCain	540-372-9890 800-883-1833 (24 hrs)
	2000 Trenton Ave. Richmond, VA. 23234	Jon Francisco	804-275-5380 800-883-4675 (24 hrs)



# Colonial Pipeline Company

## OIL SPILL RESPONSE ORGANIZATIONS

### Northeast

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE NUMBERS
Miller Environmental Group Inc. OSRO # 0200	Corporate Office 538 Edwards Ave. Calverton, NY 11933	George Wallace	800-394-8604 (24HR) 631-369-4900 ext 241 (b) (6) (cell)
	New York Office Pier 7 ½ Staten Island, NY 10301	Mike Grodeska	718-727-7303 (24 hr) (b) (6) (mobile) (b) (6) (mobile2)
	New Jersey Office 105 Riverview Drive Paulsboro, NJ 08066	Gary Humphreys	856-224-1100 ( 24 hr) (b) (6) (mobile)



# Colonial Pipeline Company

## PIPELINE REPAIR CONTRACTORS

### Northeast District

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE
Atlantic Industrial & Mechanical	5730 Pennington Ave. Baltimore, MD 21226	Gordon "Clay" Lau	W: 410-355-1869 C: (b) (6)
Bradford Brothers, Inc.	11712 Statesville Rd. Huntersville, NC 28078	Dee Bradford	W: 704-875-1341 C: (b) (6) H: (b) (6)
C. Bruce Carlson, General Contracting	941 Hoods Mill Rd. Woodbine, MD 21797	Bruce Carlson	W: 410-795-4799 C: (b) (6)
Central Virginia Maintenance, Inc.	P.O. Box 300 Buckingham, VA 23291	Danny Elder	W: 434-969-1779 H: (b) (6)
JANX, Inc.	33 Clawson St. Piscataway, NJ 08854	Carl Frazee  Dan Williams	W: 800-451-6069 P: 732-488-1928 (ER) C: (b) (6) C: (b) (6)
J.D. Denson Mowing Contractors, Inc	Apex, NC	J.D. Denson	H: (b) (6) S: 919-362-1148 C: (b) (6) P: 919-669-2963 F: 919-362-1237
L.E. Bell Construction Co., Inc.	1226 County Rd. 11 Heflin, AL 36264	Larry Bell  Dan Norton	W: 800-472-9427 256-253-2676 C: (b) (6) N: 877-491-6166 H: (b) (6) F: 256-253-2994 N: 256-591-9172
Napp-Grecco Company	1500 McCarter Highway Newark, NJ 07104	Anthony Russamano	W: 973-482-3500 H: (b) (6) C: (b) (6)
		Joe Napp	W: 973-482-3500 H: (b) (6) C: (b) (6)
Ted's Landscaping & Paving	P.O. Box 6308 Freehold, NJ 07728	Ted Imfeld	W: 732-866-0503 C: (b) (6) H: (b) (6) P: 908-889-1479
Phoenix Environmental Svcs, Inc.	2309 Hwy 81, S. Suite B Loganville, GA 30052	Richard Scruggs	W: 770-466-0466 H: (b) (6) F: 770-466-0471
Riverside Contractors, Inc.	10 Commerce Ct., SE Rome, GA 30161	Dan Williams	W: 706-291-4800 H: (b) (6) C: (b) (6)
		Karen Lockhart	
Western Stress, Inc.	Richmond, VA	Martin Kellic	804-271-5447



# Colonial Pipeline Company

## ENVIRONMENTAL CONTRACTORS

### Northeast District

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE
<b>A &amp; D Environmental Services, Inc.</b> (ER, remediation, waste management & transportation)	PO Box 484 High Point, NC <a href="http://adenviro.com/">http://adenviro.com/</a>	Mike Milchuck	24/7 ER: 800-434-7750 P: 336-434-7750 F: 336-434-7752
<b>AECOM</b> (environmental and engineering consulting, remediation, H&S)	Multiple Offices Local Office: 8320 Guilford Rd., Suite L Columbia, MD 21046 <a href="http://www.aecom.com">http://www.aecom.com</a>	Jason Fronczek/Mike Parsons	P: 410-884-9280(d) C: (b) (6)
<b>APEX Companies, LLC</b> (environmental consulting)	Multiple offices Corp. Headquarters: 15850 Crabbs Branch Way, Ste. 200 Rockville, MD 20832 <a href="http://www.apexenv.com/">http://www.apexenv.com/</a>	John Strecker	P: 800-733-2739 F: 301-975-0169 W: 703-396-6730 C: (b) (6)
<b>Center for Toxicology &amp; Environmental Health (CTEH)</b>	5120 North Shore Drive North Little Rock, AR 72118	Cory Davis	P: 866-869-2834 (24 HR) P: 501-801-8500
<b>CH2M Hill</b> (environmental and project management)	Multiple offices Local Offices: Philadelphia, PA; <a href="http://www.ch2m.com/">http://www.ch2m.com/</a>	Scott Oppelt	P: 800-CH2MHILL P: 215-640-9056 W: 215-653-4220 C: (b) (6) F: 215-640-9256
<b>Clean Earth, Inc.</b> (materials disposal & recycling)	Multiple offices Headquarters: 334 South Warminster Road Hatboro, PA 19040 Local offices: NY, NJ, DE, PA, MD <a href="http://www.cleaneearthinc.com/">http://www.cleaneearthinc.com/</a>	Carl Elliott	P: 215-734-1400 C: (b) (6) F: 215-734-1415 Toll Free 866-722-1991
<b>Delta Consultants</b> (environmental consulting)	Multiple offices Headquarters: 5910 Rice Creek Pkwy., Suite 100 St. Paul, MN 55126 Local Offices: VA, MD, NJ, NY <a href="http://www.deltaenv.com">http://www.deltaenv.com</a>	Gary Schroeder Shawn Bobick	P: 800-477-7411 P: 651-639-9449 F: 410-309-1180
<b>EA Engineering Science &amp; Technology</b> (Environmental/engineering consulting & management, remediation, waste management, etc.)	Multiple offices Corp. Headquarters: 11019 McCormick Road Hunt Valley, MD 21031 <a href="http://www.eaest.com/">http://www.eaest.com/</a>	Kathy Fox	P: 410-584-7000 F: 410-771-1625 W: 410-538-8202 x103 C: (b) (6)
<b>Environmental Alliance, Inc.</b> (environmental consulting)	Multiple Offices Corp. Headquarters: 1812 Newport Gap Pike Wilmington, DE 19808 Local Offices: VA, PA, NJ, MD <a href="http://www.envalliance.com/">http://www.envalliance.com/</a>	Matt Geary	P: 866.748.3164 W: 302-995-7544 F: 302-995-0941
<b>Earth Matters</b> (drilling, mon. wells)	5225 Kerger Rd. Ellicott City, MD 21043	Michael Wiley	P: 410-747-4400
<b>E.I. DuPont</b>	Rt. 130 Chamber Works Deepwater, NJ 08023	Terry Bishop	800-626-1717 800-441-9346



# Colonial Pipeline Company

## ENVIRONMENTAL CONTRACTORS

### Northeast District

<b>Entrix, Inc.</b> (environmental and natural resources management consulting)	Multiple offices Local Office: 10 Corporate Circle Suite 300 New Castle, DE 19720 <a href="http://www.entrinx.com/">http://www.entrinx.com/</a>	Ralph Markarian	P: 302-395-1919 F: 302-395-1920
<b>Environ</b> (environmental, ecological consultant)	1600 Parkwood Circle Suite 310 Atlanta, GA 30339 <a href="http://www.environcorp.com">www.environcorp.com</a>	Joe Nicolette	P: 678-388-1665 C: (b) (6)
<b>Environmental Resources Management</b> (environmental consulting & management, remediation, waste management, risk management)	Multiple offices Local Offices: Ewing, NJ; Annapolis, MD; Richmond, VA <a href="http://www.erm.com/">http://www.erm.com/</a>	Susan Angyal	P: 609-895-0050 W: 609-403-7559 F: 609-895-0111 C: (b) (6)
<b>Freehold Cartage, Inc.</b> (vac trucks, tankers, roll offs, trailers)	Multiple offices Headquarters: PO Box 5010 825 Highway 33 Freehold, NJ 07728 Local offices: PA, DE <a href="http://www.freeholdcartage.com/">http://www.freeholdcartage.com/</a>		P: 732-462-1001
<b>Frey Engineering, LLC</b> (environmental consulting, New Jersey LSRP)	1117 State Route 31 Suite 4 Lebanon, NJ 08833 <a href="http://www.freyengineering.com">www.freyengineering.com</a>	Nelson Luzzetti	P: 908-238-0502x125 C: (b) (6) F: 908-735-8537
<b>Groundwater &amp; Environmental Services, Inc.*</b> (environmental consulting, assessment & remediation w/petroleum emphasis)	Multiple offices Headquarters: 1340 Campus Pkwy, Building B Neptune, NJ 07753 Local Offices: VA, MD, NJ, PA, NY <a href="http://www.gesonline.com">http://www.gesonline.com</a>	Jennifer Huha (NJ-PA-DE) Christopher Mulry (MD-VA)	P: 800-220-3068 P: 800-220-3606 F: 732-919-0916 C: (b) (6) (Huha) C: (b) (6) (Mulry)
<b>Hunter Research</b> (historical, archeological consultants)	120 West State Street Trenton, NJ 08608 <a href="http://www.hunterresearch.com">www.hunterresearch.com</a>	Ian Burrow	P: 609-695-0122 C: (b) (6) F: 609-695-0147
<b>PetroChem Recovery Services</b> (emergency response, vac trucks, remediation, materials disposal, environmental consulting)	PO Box 1458 Norfolk, VA 23501 <a href="http://www.petrochemrecovery.com/">http://www.petrochemrecovery.com/</a>	David Byrd/Tammy Coffey	24/7 ER: 800-723-6951 P: 757-627-8791 F: 757-640-1261
<b>Purgo, Inc.</b> (petroleum contaminated soils thermal destruction)	11023 Washington Highway Suite 100 Glen Allen, VA 23059 <a href="http://www.rlctechnologies.com">http://www.rlctechnologies.com</a>	Gay Turner	P: 800-446-2614 W: 804-550-0400 F: 804-550-3833
<b>Progressive Engineering &amp; Construction, Inc.</b> (environmental consulting, remediation)	Local Office: 221 Pitman Ave. Pittman, NJ 08071 <a href="http://www.progressiveec.com">http://www.progressiveec.com</a>	Bridget Morello	P: 813-930-0669 F: 813-930-9809 C: (b) (6)
<b>PSC Industrial, Environmental &amp; Remediation Services</b> (emergency response, trucks, remediation, environmental)	Multiple Offices Local Office: 550 Pinetown Rd., #166 Ft. Washington, PA 19034 Service Area: CT,DE,MD,NJ,PA,VA <a href="http://www.pscnow.com">http://www.pscnow.com</a>		27/7 ER: 877-5-PCS NOW P: 215-643-5466
<b>Soil Safe</b> (petroleum contaminated soil recycling)	6700 Alexander Bell Dr. Suite 300 Columbia, MD 21046 <a href="http://www.soilsafe.com/">http://www.soilsafe.com/</a>	George Dohn	P: 800-562-4365 W: 410-872-3990x121 F: 410-872-9082 C: (b) (6)
<b>Summit Site Services</b>	101 Norris Lane	Rich Kimes	P: (410) 282-8100



# Colonial Pipeline Company

## ENVIRONMENTAL CONTRACTORS

### Northeast District

(drilling, mon. wells, probing)	Baltimore, MD 21222		F: (410) 282-2788 C: (b) (6)
<b>The Response Group</b> (emergency response planning, mapping, documentation, software)	13231 Champion Forrest Drive Ste. 310 Houston, TX. 77069 <a href="http://www.responsegroupinc.com/">http://www.responsegroupinc.com/</a>	Roy Barrett	281-880-5000 281-596-6976 (Fax) 800-651-3942 (24 Hr)
<b>Tri-State Bird Rescue &amp; Research, Inc.</b> (wildlife care)	110 Possum Hollow Rd. Newark, DE 19711 <a href="http://www.tristatebird.org/">http://www.tristatebird.org/</a>	Eileen Gilbert Heide Stout	W: 302-737-9543 F: 302-737-9562 P: 800-710-0695 or 800-710-0696
<b>US Filter Recovery Services</b> (water treatment, product recovery)	1105 N. Point Blvd Baltimore, MD 21224	Jim Gaunch Ron Quaid Emergency Response Line (After Hours) Jim Gaunch	(7am- 5pm) 443-463-7822 410-284-2805 717-877-9331 888-749-8344 443-463-7822
<b>Water Depot, Inc.</b> (vac trucks, tanker, water treatment)	1301 Avondale Rd. New Windsor, MD 21776	William Gereny	P: 410-857-9670
<b>Wetland &amp; Ecological Consultants, Inc.</b> (wetland/stream expertise, aquatic services, endangered species)	3225 South Cherokee Lane Bldg. 800 Woodstock, Georgia 30188 <a href="http://www.wet-eco.com">http://www.wet-eco.com</a>	Richard Whiteside or Shanna Cahill	P: 770-591-9990 C: (b) (6) F: 770-591-9993
<b>Wetlands &amp; Environmental Technology, Inc.</b>	P.O. Box 333 Woodbury, NJ 08096	Patti Burns	P: 856-686-9560 C: (b) (6) F: 856-504-0179

\*contracted for emergency response assistance to Planning Section and as needed.



# Colonial Pipeline Company

## AERIAL RECONNAISSANCE CONTRACTORS

### Northeast

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE
Aerial Transmission Survey	Carrboro, NC	Peter Julian	P: 919-933-1174
Air Carolina Spartanburg Downtown Airport	Spartanburg, SC	Dave Treinis	P: 864-574-4857
Aviation Charters, Inc.	106 Sharon Rd. Trenton, NJ 08691	Ted Pichel	W: 800-225-5833 or 609-259-0700 F: 609-259-6404
Grand Ideas Helicopter Services	Greensboro, NC	Robert Elkins	W: 336-665-9197 P: 336-218-3090
Hawkeye Helicopter	Wadesboro, NC	J.D. Scott	P: 704-695-1300
Helicopter Applicators Incorporated	1670 York Road Gettysburg, PA 17325	Kenneth Wymer Glenn Martin Kirk Martin	P: 717-321-5672 P: 717-495-6846 717-337-1370/717-495-7749
Helicopters of Charleston		Donnie Mullis	P: 800-264-8550
Helicopter Transport Services	P.O. Box 14429 Norfolk, VA 23518	Keith Smith	P: 757-853-7727
Heloair, Inc.	5733 Huntsman Rd. Richmond, VA 23250	Whit Baldwin	P: 804-226-3400
Horizon Helicopters	2035 Sunset Lake Rd. Newark, DE 19702	Harry Griffith	W: 302-368-5135 P: 302-657-6296 F: 302-368-4438
Keystone Helicopter Corp.	1420 Phoenixville Pike West Chester, PA 19380		W: 610-644-4430 F: 610-644-7681
Liberty Helicopters, Inc.	Heliport West 30 <sup>th</sup> St. & 12 <sup>th</sup> Ave. NY, NY 10001	David Shaeffer	W: 908-377-4911 (24 Hr) P: 888-692-4354 P: 908-474-9700
Million Air	400 Portugee Rd Richmond, VA 23250	Charter Services	P: 804-222-3700
NC Helicopter Service	Gastonia, NC	Mr. Kalso	P: 704-629-4677
Palmetto Helicopter		Julie Owens	P: 864-277-6100
Piedmont Aviation	6427 Airport Pkwy Greensboro, NC 27419	24 Hrs	P: 800-438-4407(24 Hrs)
Professional Helicopter Corp.	Liberty St. Winston-Salem, NC 27105	Glen Wenzel	P: 800-833-5846 P: 336-922-1577
US Helicopter Services	Hwy 74 West P.O. Box 625 Marshville, NC 28103	Wayne Schmitz	W: 704-233-5000 P: 704-282-3201 H: (b) (6)
Royal Air	SJ Regional Airport 68 Stacey Hines Rd. Medford, NJ 08055	Steve Jackson	P: 800-944-3030 x235 P: 888-354-4485
Summit Helicopter, Inc.	PO Box 39 595 Cougar Dr. Cloverdale, VA 24077	Chief Pilot: John Reed john.reed@summithelicopters.com	P: 540-992-550 F: 540-992-5503



# Colonial Pipeline Company

## OTHER EMERGENCY RESPONSE EQUIPMENT SUPPLIERS

### Northeast District

COMPANY NAME	ADDRESS	CONTACT	TELEPHONE NUMBERS
Ace Transport, Ltd.	Kenly, NC	Will Bass	800-849-5946 919-284-3105
Allstate Power Vac	Operations 928 East Hazelwood Ave Rahway, NJ 07065	Rick Garvey Glenn Burke	800-876-9699 (24 hr) 732-880-9600 (pager) 732-880-9111 (pager) 732-815-9892 (fax) 908-862-3800 800-876-9697
Auchter Industrial Vac	4801 South Wood Ave Linden, NJ 07036	Brian Auchter	908-862-2277 (24 hr) 908-925-1515
Baker Tanks	SC, NC	Bruce Freeman	843-563-2322
Clean Harbors Environmental Services	2858 Route 322 Swedesboro, NJ 08085		856-467-3100
Clean Venture Environmental Services	201 South First Street Elizabeth, NJ 07206	Carlos Ferreira	908-354-0210
Cumberland/Harnett	4001 NC Hwy 210 N. Spring Lake, NC 28390	Stewart Lewis	910-497-7183 (b) (6) (Home)
Eagle Transport	515 S Chimney Rock Rd. Greensboro, NC 27409	Terminal Manager Williams Miller	336-294-8800 336-229-7547 800-420-0730 (24 Hr Pager) 800-420-0731
	3885 Buffalo Rd. Selma, NC 27576	Wade Johnson	919-965-4191 (b) (6) (cell)
East Coast Transport	Goldsboro, NC	Gerald Combs	919-735-3477 800-899-4746
Foster Fuels	113 Old Main St. Brookneal, VA 24528	Watt Foster	800-344-6457 804-376-2322 804-376-5665 (After hrs)
		Lenwood Rigney	804-376-3956 (After Hrs)
Four Seasons Env. Svcs	3107 S. Elm & Eugene St Greensboro, NC 27406	Brad Snover	336-273-2718
Freehold Cartage	P.O. Box 5010 Freehold, NJ 07728-5010	Tim Blanchet Tommy Scuderi Robert "Boomer" Buscaglia	732-462-1001 732-462-3318 (24 hr) 800-290-7068 (Svc)
Holston Companies (Tankers Only)	Chattanooga, TN, NC, SC, VA	John Williams Roger Wilson	800-222-4530 800-633-8253
Kenan Transport Co.	1031 Boulder Rd. Greensboro, NC	Joe Ball	336-299-2386
	Wilmington, NC	24 Hr. Dispatcher	910-762-3377
	4338 Buffalo Rd. Selma, NC 27576	Kevin Watts Pager	919-865-8116 800-578-7243 (ID # 150451/#20057)
	Montvale, VA	Ron Payne	540-982-2593 800-768-8765 (24 Hr)
Miller Environmental Group	Philadelphia/Baltimore/ Washington D.C.	Gary Humphries	609-352-3296



# Colonial Pipeline Company

## OTHER EMERGENCY RESPONSE EQUIPMENT SUPPLIERS

### Northeast District

COMPANY NAME	ADDRESS	CONTACT	TELEPHONE NUMBERS
Oil Transport, Inc.	4419 Bainbridge Blvd Chesapeake, VA 23320	Mike Anderson	757-545-8474
Pope Transport (Tankers Only)	Charlotte Area	Joey Johnson	800-228-6981
	Selma, NC	Mike Denning Phil Evans (Mt. Olive)	800-722-2107 919-658-6566 919-329-1137 x105
Petroleum Transport	401 S. Main St. Mt. Airy, NC 27030	Dispatcher, Dale Haws Jim York	800-345-4955 336-789-4932
Phillip Service Corp	2869 Sandstone Dr.. Hatfield, PA 19440	Averil Rance	713-674-2406 (24 hr crisis) 215-997-1315 (fax) 215-882-2676 (After hrs)
Safety Clean (TS) Inc.	208 Watlington Ind. Dr. Reidsville, NC 27320	Emily Foeller	800-334-5953 336-361-6114
The City of Greensboro Fire Department	1514 North Church Street Greensboro, NC 27405	Graham (Jim) Robinson	336-430-6042
Trimac	1676 Granby St. Roanoke, VA 24012	Jerry Abbott	540-343-9324 800-877-1374
Triumvirate Environmental	1500 Carbon Avenue Baltimore, MD 21226	Craig Childress	410-636-3700 (office) (b) (6) (mobile)
Williams Fire & Hazard Control Inc.	P.O. Box 1359 Mauriceville, Texas 77626	24-Hour Emergency	409-727-2347 or 281-999-0276
Wendell Transport	Selma, NC	Danny Holland	919-965-6916
	Charlotte Area	Dee Dooley	704-93-9265 800-852-9346
	325 Exide Dr. Clayton, NC 27576	Clyde Castleberry Ray DeHart	800-307-0055 888-936-3355  919-553-1600
	1061 Boulder Rd. Greensboro, NC 27409		336-854-2001



# Colonial Pipeline Company

## VENDOR SUPPORT & SUPPLIES

### Northeast

Equipment Rental & Pipe Supply Companies			
COMPANY	ADDRESS	CONTACT	TELEPHONE
A & A Rentals	29 N. Delsea Drive Glassboro, NJ 08028		856-881-9118
Ace Tool & Equipment	7131 Lee Highway Falls Church, VA 22046		703-532-5600
Air Products & Chemicals, Inc.	7201 Hamilton Blvd Allen	Dave Chandler Kay Melochick Fax	800-273-9427 800-227-4163 x2100 610-406-6369
American Industrial Supply	326 Goodwin Street Perth Amboy, NJ 08862	Ned Higgins Judy Dellisante	732-826-7600 732-571-8845 (Emerg #1) 732-636-2472 (Emerg #2)
Ben's Rental	711 Baltimore Blvd Westminster, MD 21157	Office #1 Ronnie Office #2 Kevin	410-848-3532 410-346-7939 410-876-1699 410-848-2458 410-876-0064 (Fax)
Louis P. Canuso, INC.	401 Crown Point Road Thorofare, NJ 08086	Joe Canuso Jerry Canuso	609-929-4578(24hr.) 609-929-4577(24hr.) 856-845-2700
Industrial Valco, Inc	730 Cardinal Dr. Bridgeport, NJ 08014	Joe Vereneult Fax	856-467-2307 or 800-898-8526 856-467-2489
McJunkin Red Man Corp.	4TH AND PENN STS MARCUS HOOK, PA 19061	Lou A. Jacono	610-485-7010
McLean Rental	15 Douglas Court Sterling, VA	Paul Nicely Kurt Specht	20-259-8545 202-597-4157
	7601 Pulaski Highway Baltimore, MD	Darren Simms	P - 410-339-8285
Neff Equipment Company	Richmond, VA		804-798-8215
	Willimasburg, VA		757-874-5013
Prime Equipment	9801 Nokesville Rd Manassas, VA 20110		703-335-1777
Pump & Power Equipment	8019 Dorsey Rd. Jessup, MD 20794		410-799-1800 410-799-1804 (Fax)
Rental Tools & Equipment	Chesapeake, VA		804-543-5723
Rental World	2721 Blk Horse Pk & Cross Keys Turnersville, NJ 08012		856-227-4242
Rent Rite	571 Rt 27 Iselin, NJ		732-283-2200
Rent-X	Charlottesville, VA		804-977-5915
Sunbelt Rentals	3090 Rt 73 North Maple Shade, NJ		856-779-1400
Sunbelt Rentals	223 Paulsboro Rd Swedesboro, NJ 08085		800-508-4761
Triple A Rental Center	Lynchburg, VA	Harley Norman	804-846-5243 804-239-1477
United Rentals	109 Sulfur Springs Rd. Baltimore, MD 21227		410-242-9600
Y-BY Rentals	1090 Rt 45 Wenonah, NJ 08090	Chris Uricher	856-468-9500



# Colonial Pipeline Company

## VENDOR SUPPORT & SUPPLIES

### Northeast

Materials & Services			
COMPANY	ADDRESS	CONTACT	TELEPHONE
American Industrial Supply	326 Goodwin Street Perth Amboy, NJ 08862	Ned Higgins Judy Dellisante	732-826-7600 732-571-8845 (Emerg #1) 732-636-2472 (Emerg #2)
Appomattox Farm & Home, Inc	Appomattox, VA	Timmy Tolley	804-352-8449
Arundel Potomac Airgas, Inc.	E. Fourth St. & Pine Ave. Frederick, MD		
Beltsville Construction Supply	11525 Edmondson Rd. Beltsville, MD 20705	Fax	301-937-8087 307-937-2885
Carden's Farm & Home Supply	Cumberland, VA		804-492-9617
Dealer's Service	82 E. Browning Rd. Bellmawr, NJ 08031	Rich Mishler Bob Morrison	856-222-0136
Fluvanna Farm & Home Ctr	Fork Union, VA		804-842-3113
Independent Sealing Co. (Gaskets)	116 Shures Lane Philadelphia, PA 19127	Paul Benson	215-508-3400 (b) (6) ell 24hr.) (Home)
Integra Supply	1021 Saville Ave Eddystone, PA 19016-0797	Fax	800-829-4253 610-874-8989
Hardware & Supply Co. of Chester, Inc.	Edgemont at Fourth Chester, PA 1-9016	Fax	610-876-6116 or 800-347-9393 610-872-7544
Flowserve (PPL Repair)	1224 Forest Parkway Suite 120 Paulsboro, NJ 08066	Scott Jenkins (Tech) or Vern Chila Fax Andy Stanton (Sales)	856-423-5600 856-423-3955 856-981-5858
Max L. Brown Hardware	68 Roosevelt Ave. Carteret, NJ 07008	Harvey Gross Dick Brown	W - 732-541-5196 H - (b) (6) H -
Motorola (Radio Repair)	42 A Hackensack Ave. Kearney, NJ 07032		973-690-5932 877-359-5350
Riehl's Towing	185 A Timber Lane Rd. Clarksboro, NJ 08020	Clieve Riehl 24 Hr	856-848-0864 856-423-7990
Woodbridge Machine Shop	259 Bergen St. Woodbridge, NJ 07095	Steve Sepa Fax	732-634-0179 732-602-0922
S.W. Rogers (Land Excavation)	P.O. Box 398 Gainsville, VA 22065	Rich Byrd	703-754-8100

Sanitation Supplies			
COMPANY	ADDRESS	CONTACT	TELEPHONE
Johnny on the Spot	3168 Bordentown Ave. Old Bridge, NJ 08857	Fax	800-491-5687 or 732-721-3443 732-721-8698
Horizon Disposal Services, Inc.	235 Gibbs Avenue Trenton, NJ 08611		609-341-9100
M.O. Portable Toilets	Cartersville, VA		800-440-6116
Garth Septic Service	Orange, VA	William Garth	540-672-361 (24 Hrs)



# Colonial Pipeline Company

## VENDOR SUPPORT & SUPPLIES

### Northeast

Dumpsters & Roll-Offs			
COMPANY	ADDRESS	CONTACT	TELEPHONE
Robinson Waste	404 Oakland Ave Bellmawr, NJ 08031		856-931-3133

Gravel & Sand			
COMPANY	ADDRESS	CONTACT	TELEPHONE
Kyanite Mining Corporation	Dillwyn, VA	Gene Dixon	804-983-2084
Rock Products	1675 Crown Point Road, West Deptford Township, New Jersey 08086		856-848-7934

Security Services			
COMPANY	ADDRESS	CONTACT	TELEPHONE
Old Dominion Security C.	Richmond, VA		804-328-0700
American Security Group	Richmond, VA		804-355-2000 or 888-623-7283

Jon Boats & Supplies			
COMPANY	ADDRESS	CONTACT	TELEPHONE
Ed's Marine	Ashland, VA		804-798-6654
P. Bee's Sports, Inc	Orange, VA		540-672-4542

Absorbents, Boom, & Diapers			
COMPANY	ADDRESS	CONTACT	TELEPHONE
Joseph Gartland, Inc.	80 West Browning Road Bellmawr, NJ 08031	Rick Biglin	856-931-7100 (b) (6) (mobile)

Safety & Personal Protection Equipment			
COMPANY	ADDRESS	CONTACT	TELEPHONE
Clean Harbor Co.	Chesapeake, VA		757-543-9240
Fire & Safety Equipment	Concord, VA		804-993-2425
Fire Services, Inc	VA Beach, VA		804-464-9488
Fire-X Corporation	Norfolk, VA		757-855-0196
Home Depot	Chesapeake, VA		757-465-9166
Lowe's Home Improvement	Chesapeake, VA		757-465-5757
United Rentals	Chesapeake, VA		757-543-5723
VA Equipment Rentals	Chesapeake, VA		757-545-7500



# Colonial Pipeline Company

## VENDOR SUPPORT & SUPPLIES

### Northeast

<b>Welding Supplies</b>			
<b>COMPANY</b>	<b>ADDRESS</b>	<b>CONTACT</b>	<b>TELEPHONE</b>
Airco	Norfolk, VA		804-545-2486
Air Gas East, Inc	25192 Pleasant Valley Rd. Chantilly, VA 22065		703-471-0553 703-327-6495 (Fax)
Air Products & Chemicals, Inc.	7201 Hamilton Blvd Allentown, PA 18195	Dave Chandler Kay Melochick Fax	800-273-9427 800-227-4163 x2100 610-406-6369
	Norfolk, VA		804-622-0883
BOC Gases	Norfolk, VA		757-545-2486
Brammer Welding Supply	Farmville, VA		804-392-9403
	Lynchburg, VA Roanoke, VA	Day Emergency	804-847-1234 540-563-2895 540-362-2774
South Jersey Welding Supplies	496 Rt 38 Maple Shade, NJ		856-778-4440
Valley National Gases	201 Crown Point Rd West Deptford, NJ 08086		856-848-7321
C & O Distributors, Inc.	514 Lucabaugh Mill Rd. Westminster, MD 21157		410-848-7640 410-876-1711
Carbonic Industries	Roanoke, VA		540-342-2833
Cassco Ice Company	Charlottesville, VA		804-293-6421 (24 hrs)
Diamond Air Compressor Co.	Richmond, VA	Day	804-233-9241
		Emergency	804-219-4221
MG Industries	Richmond, VA	(24 Hrs)	804-231-1191
Wayne Oxygen & Handling	Charlottesville, VA	Day	804-295-2334
		Emergency	804-942-3327

<b>Catering Companies</b>			
<b>COMPANY</b>	<b>ADDRESS</b>	<b>CONTACT</b>	<b>TELEPHONE</b>
An Affordable Affair	Richmond, VA		804-965-9583
Big Jim's Catering & Picnic Co	Charlottesville, VA		434-296-5101
Seay Davis	Arvon, VA	24 Hrs	434-581-3255
Mastoris Catering	Bordentown, NJ		

<b>Crane Rental</b>			
<b>COMPANY</b>	<b>ADDRESS</b>	<b>CONTACT</b>	<b>TELEPHONE</b>
Addison Crane Co	Chantilly, VA	(Ans. Mach)	703-471-6777
Central VA Maintenance	Buckingham, VA	Danny Elder	804-969-1779 or 804-969-4353
Commercial Steel Erection	Madison Hgts, VA	Danny Moon (24 Hrs)	800-648-8670 804-845-7536
Neff Equipment Company	Richmond, VA		804-798-8215
Tidewater Crane & Rigging	Glen Allen, VA		804-550-0600
AmQuip	Marcus Hook, PA	Greg Hannold	215-639-9200
AmQuip	Carteret, NJ		732-802-0100



# Colonial Pipeline Company

## VENDOR SUPPORT & SUPPLIES

### Northeast

Electrical Repair & Supplies			
COMPANY	ADDRESS	CONTACT	TELEPHONE

Dry Ice			
COMPANY	ADDRESS	CONTACT	TELEPHONE
AAA Emergency Ice Service	6100 Bel Air Rd. Baltimore, MD	Fax John McPherson	410-426-1204 410-444-7728 410-529-4488
Jim's Enterprises (24 Hr)	2235 Hartranft St. Philadelphia, PA 19145		215-462-4200
Leisure Time Ice (24 Hr)	Somerville, NJ		732-819-7676
Mack the Ice Man	502 Clements Bridge Rd. Runnemede, NJ		856-939-6225
Tutti Frutti Ice Cream	520 S. Caroline Baltimore, MD	M-F, 8:00-5:00 Sat 9:00-2:00	410-327-3070

Hotels			
COMPANY	ADDRESS	CONTACT	TELEPHONE
Embassy Suites	Richmond, VA		804-672-8585
Ramada Inn	Lynchburg, VA		434-847-4424
Holiday Inn	Culpeper, VA		540-825-1253
Holiday Inn	Chesapeake, VA		757-523-1500
Spring Hill Suites	Chesapeake, VA		757-405-3100
Days Inn	Chesapeake, VA		757-547-9262
Hampton Inn	Chesapeake, VA		757-420-1550
Hilton	Lynchburg, VA		434-237-6333
Comfort Inn	Lynchburg, VA		434-847-9041



# 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 – <a href="http://www.eppsaviation.com">http://www.eppsaviation.com</a>
Flight Charter: 678-539-6313 – <a href="http://www.hillaircraft.com">www.hillaircraft.com</a>
Flightworks – McCollum Field, Kennesaw – 800-255-1971 or 770-427-5660 – <a href="http://www.flightworks.com">www.flightworks.com</a>
Hill Aircraft & Leasing Corp – Fulton Co - Charlie Brown Airport - 404-691-3330 – <a href="http://www.hillaircraft.com">www.hillaircraft.com</a>
L. E. Bell – Heflin, AL - 800 472-9427 – <a href="http://www.admin@le-bell.net">www.admin@le-bell.net</a>

### MAINLINE AIRPORTS (West to East)

<b>Houston, Texas</b>
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

<b>Beaumont, Texas</b>
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

<b>Lake Charles, Louisiana</b>
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

<b>Lafayette, Louisiana</b>
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

<b>Baton Rouge, Louisiana</b>
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

<b>Hattiesburg, Mississippi</b>
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
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<b>Meridian, Mississippi</b>
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

<b>Tuscaloosa, Alabama</b>
Municipal Airport - KTCL
Bama Air – 800-937-1716
Hours of Operation – 0500-2200
Runway 6,498 X 150 - ILS Approach

Rental Cars Available -	Avis	205-345-3333
	Enterprise	205-349-4446
	U-Save	205-349-6144



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

<b>Birmingham, Alabama</b>
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
	Hertz	205-591-6090
	National	205-592-7259
	Budget	205-591-6090

<b>Anniston, Alabama</b>
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 cell (b) (6)
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

<b>Atlanta, Georgia</b>
Dekalb-Peachtree Airport - KPDK
Mercury Air Center - 770-451-7676
Hours of Operation - 24 hours
Runway 6,000 X 100 - ILS Approach

Rental Cars Available -	Auto-Save thru FBO	
	Avis	770-454-5000
	Enterprise	770-452-0010

<b>Anderson, South Carolina</b>
Anderson Reginal 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 <a href="http://www.andersoncountysc.org/web/Transportation_01.asp">http://www.andersoncountysc.org/web/Transportation_01.asp</a>
24 – Hours cell phone (b) (6)



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Runway 6,000 X 150 – ILS, VOR, GPS Approach
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Rental Cars Available -	Budget	864-231-6226
	Enterprise	864-222-2775

<b>Greenville, South Carolina</b> (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)

Rental Cars Available -	
Enterprise	864-297-0089

<b>Greenville, South Carolina</b> (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
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<b>Greer, South Carolina</b> (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

<b>Charlotte, North Carolina</b>
Charlotte Douglas International Airport - KCLT
Wilson Air Center - 704-359-0440
Hours of Operation - 24 hours
Runway 10,000 X 150 - ILS Approach



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

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
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**Greensboro, North Carolina**

Piedmont Triad International Airport – KGSO

Atlantic Aero - 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	
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**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



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

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

<b>Charlottesville, Virginia</b>
Charlottesville-Albamarle 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

<b>Manassas, Virginia</b>
Manassas Regional Airport - KHEF
APP Jetcenter – 866-459-5387
Hours of Operation- 0630-2230 - no after hours number
Runway 6,200 X 100 - ILS Approach

Rental Cars - Dudley Martin Chevrolet	703-368-2111
Enterprise	703-333-9696

<b>Washington, D. C.</b>
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



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

<b>Frederick, Maryland</b>
Frederick Municipal Airport - KFDK
Landmark Aviation - 301-662-8156
Hours of Operation - 0700-2100 - no after hours 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	

<b>Carroll County Regional Airport - KDMW</b>
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

<b>Baltimore, Maryland</b>
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

<b>Baltimore, Maryland</b>
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

<b>Wilmington, Delaware</b>
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
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# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Budget	302-764-3300
Enterprise	302-323-0850

<b>Philadelphia, Pennsylvania</b>
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

<b>Trenton, New Jersey</b>
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

<b>Newark, New Jersey</b>
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**

<b>Rome, Georgia</b>
Richard B. Russell Airport - KRMG
Russell Airport - 706-295-7835
Hours of Operation - 0700-1930 – after hours call 911
Runway 6,000 X 150 - LOC/DME Approach



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Rental Cars Available -	Enterprise	706-290-1093
	Automax	706-295-7835

<b>Chattanooga, Tennessee</b>
Lovell Field - KCHA
TAC Air – 423-894-2739
Hours of Operation – 24 Hours
Runway 7,400 X 150 - ILS Approach

Rental Cars Available -	Avis	423-855-2232
	Budget	423-855-2224
	Hertz	423-855-8133
	National	423-855-2229
	Enterprise	423-855-2288

<b>Nashville, Tennessee</b>
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

<b>Knoxville, Tennessee</b>
McGhee Tyson Airport - KTYS
TAC Air 865-970-9000
Hours of Operation – 24 Hours
Runway 9,000 X 150 - ILS Approach

Rental Cars Available -	Avis	865-970-2985
	Budget	865-342-3220
	Hertz	865-970-3010
	National	865-970-2993
	Enterprise	865-970-9000

### BAINBRIDGE LINE



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Rental Cars Available -	Avis	478-788-3840
	Hertz	478-788-3600

<b>Macon, Georgia</b>
Middle Georgia Regional Airport – KMCN
Lowe Aviation - 478-788-3491
Hours of Operation - 0500-2200 M-F; 0600-2200 S-S – after hours call Macon FSSK
Runway 6,500 X 150 - ILS Approach

<b>Americus, Georgia</b>
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

<b>Albany, Georgia</b>
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

<b>Bainbridge, Georgia</b>
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

<b>Augusta, Georgia</b>
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
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# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Budget	706-790-6902
Hertz	706-798-3970
National	706-798-5835

### SELMA LINE

<b>Raleigh-Durham, North Carolina</b>
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

<b>Fayetteville, North Carolina</b>
Grannis Field - KFAY
Landmark Aviation – 910-321-7540
Hours of Operation - 0600-0000 - no after hours 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
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### ROANOKE LINE

<b>Lynchburg, Virginia</b>
Regional/Glenn Field - KLYH
Virginia Aviation – 434-237-8420
Hours of Operation – 0500-2359 – after hours call 804-239-3089 or 804-384-5681



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Runway 7,100 X 150 - ILS Approach
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Rental Cars Available -	Avis	434-239-3622
	Budget	434-237-1444
	Enterprise	540-563-8055
	Hertz	434-237-6284

### Roanoke, Virginia

Regional Airport - KROA
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Landmark Aviation - 540-563-4401
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Hours of Operation – Continuous
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Runway 6,800 X 150 - ILS Approach
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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
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Million Air - 800-222-3700
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Hours of Operation – Continuous
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Runway 9,000 X 150 - ILS Approach
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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

### Newport News, Virginia

Williamsburg International Airport - KPHF
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Rick Aviation – 757-874-6415
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Hours of Operation - Continuous
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Runway 8,000 X 150 - ILS Approach
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Rental Cars Available -	Avis	800-831-2847
	Thrifty	800-847-4389



# Colonial Pipeline Company

## AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

<b>Norfolk, Virginia</b>
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

### Northeast

<b>Baltimore Area</b>		
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Center Point Terminal (South Baltimore)	3100 Vera Street Baltimore, MD 21226	<b>Manager: Gary Kirakos</b> Phone: 410-355-4500 Cell: (b) (6) Pager: none Home: (b) (6) Fax: 410-354-1337
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Sunoco Logistics	2155 Northbridge Ave. Baltimore, MD 21226	<b>Supervisor: Scott Russell</b> Phone: 410-355-3351 Cell: (b) (6) Fax: 866-528-9784
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Signature Flight Support	2 Aaronson Dr. Glen Burnie, MD 21061	<b>Manager: Brian Reidy</b> Phone: 410-859-0011 Cell: (b) (6) Fax: 410-684-2801
<b>Alternate: Mitch Spaniol, Fuel Farm Manager</b>		Phone: 410-859-3323 Cell: (b) (6)
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Kinder Morgan Enterprises	P.O. Box 505 Woodbine, MD 21797	<b>Terminal Manager: Robert McKinley</b> Phone: 410-549-5195 Cell: (b) (6) Fax: 410-549-5196
<b>Alternate: Todd Thomas, Quality Assurance Manager</b>		Phone: 410-598-0031 Cell: (b) (6) Fax: 832-397-4594
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Hess Corp.	6200 Pennington Ave. Baltimore, MD 21226	<b>Manager: Ed Theriault</b> Phone: 410-355-0700 Cell: (b) (6) Home: (b) (6) Fax: 410-355-5763



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

#### Baltimore Area

SHIPPER	ADDRESS	TELEPHONE
BP Products No. America Inc. (Curtis Bay)	801 E. Ordinance Rd. Baltimore, MD 21226	<b>Manager: Ray Wagner</b> Phone: 410-636-0522, x3 Cell: (b) (6) Home: (b) (6) Fax: 410-636-2162
SHIPPER	ADDRESS	TELEPHONE
Apex Oil Company - North (North Baltimore)	5101 Erdman Ave. Baltimore, MD 21205	<b>Manager: Jack Weinhold</b> Phone: 410-327-3808 Cell: (b) (6) Home: (b) (6) Fax: 410-732-7551
SHIPPER	ADDRESS	TELEPHONE
Apex Oil Company - South (North Baltimore)	1622 Clinton Street Baltimore, MD 21224	<b>Manager: Bill Ransom</b> Phone: 410-342-7800 Home: (b) (6) Cell: (b) (6) Fax: 410-342-7804
SHIPPER	ADDRESS	TELEPHONE
Citgo Petroleum Corp.	2201 Southport Ave Baltimore, MD 21226	<b>Manager: Bob Truax</b> Phone: 410-355-6500 Cell: (b) (6) Home: (b) (6) Fax: 410-354-0492
<b>Alternate: Allan Melton</b>		Cell: (b) (6) Home: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Motiva Enterprises, LLC – West (South Baltimore)	3445 Fairfield Rd. Baltimore, MD 21226	<b>Complex Manager: Kevin Brown</b> Phone: 410-354-4201 Cell: (b) (6) Home: (b) (6) Fax: 410-354-1192
<b>Alternate: Chris Hogan (Term. Superintendent-both Terminals)</b>		Phone: 410-354-4207 Cell: (b) (6) Fax: 410-354-1192 24 hr. duty operator 443-324-1840
SHIPPER	ADDRESS	TELEPHONE
Motiva Enterprises, LLC – East (South Baltimore)	2400 Petrolia Ave Baltimore, MD 21226	<b>Complex Manager: Kevin Brown</b> Phone: 410-354-4201 Cell: (b) (6) Home: (b) (6) Fax: 410-354-1192



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

<b>Baltimore Area</b>		
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
NUSTAR Energy (South Baltimore)	1800 Frankfurst Ave. Baltimore, MD 21226	<b>Manager: Tim Hutson</b> Phone: 410-355-6262-ext.113 Cell: (b) (6) 24 Hour: 410-355-6262 ext. 112 or 114 Fax: 410-354-0161
<b>Regional Manager's Office (same address as above)</b>		<b>Reg. Manger: TBD</b> Phone: 410-355-6262 ext. 101 Fax: 410-707-0603



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

#### Fairfax Area

SHIPPER	ADDRESS	TELEPHONE
ASIG – Dulles	#2 Tank Farm Road Sterling, VA. 20166	<b>Manager: Dave Barrett</b> Phone: 703-568-2789 Fax: 703-572-8335
SHIPPER	ADDRESS	TELEPHONE
BP Oil Company	9601 Colonial Ave. Fairfax, VA 22031	<b>Manager: Michael Younce</b> Phone: 703-503-3687 Cell: (b) (6) Fax: 703-425-9176
<b>Alternate: Tim Hayes, District Manager</b>		Phone: 732-541-5131 Cell: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Citgo Petroleum - Fairfax	9600 Colonial Ave. Fairfax, VA 22031	<b>Manager: Peter Adamczyk</b> Phone: 703-323-1100x105 Cell: (b) (6) Fax: 703-323-1348
SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne - Fairfax	3790 Pickett Rd. Fairfax, VA 22031	<b>Manager: George Conover</b> Phone: 703-323-1500 Cell: (b) (6) Home: (b) (6) Fax: 703-323-3966
SHIPPER	ADDRESS	TELEPHONE
Sunoco Marketing Terminal, L.P. (Bull Run)	10315 Balls Ford Rd. Manassas, VA 22110	<b>Terminal Supv: John Humphreys</b> Phone: 703-368-9055 Cell: (b) (6) Pager: 703-612-1975 Home: (b) (6) Fax: 703-361-0187
SHIPPER	ADDRESS	TELEPHONE
Motiva Enterprises, LLC (Fairfax)	3800 Pickett Rd. Fairfax, VA 22031	<b>Manager: Susan Horning</b> Phone: 703-259-2083 Cell: (b) (6) Fax: 703-425-2477



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

#### Linden Area

SHIPPER	ADDRESS	TELEPHONE
Amerada Hess – Newark	1111 Delancy Street Newark, NJ 07105	<b>Terminal Manager: Matt Paraskevas</b> Phone: 973-589-0100 Corporate: 732-750-6000 (24 hr) Cell: (b) (6) Fax: 973-589-3473
SHIPPER	ADDRESS	TELEPHONE
BP Products	760 Roosevelt Ave. Carteret, NJ 07008	<b>Manager: David Aparisio</b> Phone: 732-541-5131, x605 Cell: (b) (6) Fax: 732-541-9434
SHIPPER	ADDRESS	TELEPHONE
BP Marine	350 Coastal Street Building 350 Newark, NJ 07114	<b>Manager: Martin Warr</b> Phone: 973-465-2428 Fax: 973-465-2434
SHIPPER	ADDRESS	TELEPHONE
Buckeye Pipeline Co.	2650 Marshes Dock Rd. P.O. Box 2650 Linden, NJ 07036	<b>Manager: Tiffany Alesski</b> Phone: 908-374-5346 Cell: (b) (6) Fax: 908-862-8094
SHIPPER	ADDRESS	TELEPHONE
CITGO Petroleum	4801 South Wood Ave. Linden, NJ 07036	<b>Manager: Bob Keiser</b> Phone: 908-523-2303 Fax: 908-862-6355
SHIPPER	ADDRESS	TELEPHONE
IMTT Pipeline	PO Box 67 Bayonne, NJ 07002	<b>Manager: Randy Wateres</b> Phone: 201-823-5334 Cell: (b) (6) Fax: 201-823-5401
SHIPPER	ADDRESS	TELEPHONE
Federal Petroleum Corporation	450 South Front Street Elizabeth, NJ 07202	<b>Manager: Dennis O'Leary</b> Phone: 908-820-8800 Cell: (b) (6) Fax: 908-820-8412
SHIPPER	ADDRESS	TELEPHONE
Kinder Morgan (GATX)	78 Lafayette Street Carteret, NJ 07008	<b>Manager: (Peroleum) Jeff Essig</b> Phone: 732-969-5738 Cell: (b) (6) Fax: 832-397-4489
<b>Director of Operations: Brian Wojton</b>		Phone: 732-969-5743 Cell: (b) (6)



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

<b>Linden Area</b>		
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Gulf Oil Corporation	2600 Marshes Dock Rd. P.O. Box 1159 Linden, NJ 07036	<b>Manager: Jack Lamparella</b> Phone: 908-862-1250 (24 hrs) Cell: (b) (6) Fax: 908-862-1252
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
NUSTAR Linden	3700 South Wood Ave. Linden, NJ 70736-6584	<b>Manager: Joe Nassif</b> Phone: 908-862-7342 Cell: (b) (6) Fax: 908-862-9350
NUSTAR Rack	3700 South Wood Ave Linden, NJ 70736	<b>Manager: Craig Whittemore</b> Phone: 908-862-1477 Cell: (b) (6) Fax: 908-862-1906
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Kinder Morgan Staten Island	4101 Arthur Kill Rd. Staten Island, NY 10309	<b>Manager: Rob Peters</b> Phone: 718-966-2005 Cell: (b) (6) Fax: 718-966-2001
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
NUSTAR	4501 Trembly Point Rd. Linden, NJ 07036	<b>Manager: Joe Nassif</b> Phone: 908-862-7342 Cell: (b) (6) Fax: 908-862-9350
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Motiva Enterprises	115 State Street Sewaren, NJ 07077	<b>Manager: Ralph Otis</b> Phone: 732-855-3310 Cell: (b) (6) Hom: Fax: 732-855-3284
<b>Alternate: Sean Murphy</b>		Phone: 732-855-3252 Cell: (b) (6)
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Motiva Enterprises	909 Delancy Street Newark, NJ 07105	<b>Manager: Kurt Weissmutter</b> Phone: 973-344-6815, x3 Fax: 973-344-3314
<b>Alternate: Jim Stasse (Superintendent)</b>		Phone: 973-344-6815 x 4 Cell: (b) (6)
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Kinder Morgan (Stolt Haven)	920 State Street Perth-Amboy, NJ 08862	<b>Manager: Kevin Ortenzio</b> Phone: 732-934-2002 Cell: (b) (6) Fax: 732-934-2070



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

LINDEN AREA		
SHIPPER	ADDRESS	TELEPHONE
Center Point Terminal	678 Doremus Ave Newark, NJ 17105	<b>Manager: Andre Boston</b> Phone: 973-589-8582 Cell: (b) (6) Fax: 973-344-6341
<b>Assistant Manager: Larry Dolgegiewitz</b>		Phone: 973- 589-8582
SHIPPER	ADDRESS	TELEPHONE
Conoco-Phillips Tremley Point Terminal (South Wood Ave.)	Foot of So. Wood Avenue Linden, NJ 07036	<b>Manager: Mark Kaminiski</b> Phone: 908-523-6101 Cell: (b) (6) Fax: 908-862-6719
SHIPPER	ADDRESS	TELEPHONE
Sun Pipeline Company	525 Fritztwon Road Sinking Spring, PA 19608	<b>Manager: Michael Schmidt</b> Phone: 610-670-3203 Cell: (b) (6) Fax: 610-670-3490
SHIPPER	ADDRESS	TELEPHONE
Getty Petroleum	1500 Hempstead Trpk. East Meadow, NY 11554	<b>Scheduler: John Guarino</b> Phone: 516-542-5062



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

Richmond Area		
SHIPPER	ADDRESS	TELEPHONE
Buckeye	1636 Commerce Road Richmond, VA 23224	<b>Manager: Joe Sobieski</b> Phone: 610-459-3441 Cell: (b) (6) Hom [REDACTED] Fax: 804-232-1279
SHIPPER	ADDRESS	TELEPHONE
Citgo Petroleum	210 Maury Street Richmond, VA 23224	<b>Manager: R.D. Alvis</b> Phone: 804-233-6953 Cell: (b) (6) Fax: 804-231-2503
SHIPPER	ADDRESS	TELEPHONE
Magellan	204 East 1 <sup>st</sup> Street Richmond, VA 23224	<b>Manager: David Farmer</b> Phone: 804-232-6853 Cell: (b) (6) Hom [REDACTED] Fax: 804-230-6230
SHIPPER	ADDRESS	TELEPHONE
First Energy Corporation	P.O. Box 799 Richmond, VA 23218	<b>Manager: Jimmy Brown</b> Phone: 804-233-8370 Cell: (b) (6) Hom [REDACTED] Fax: 804-232-9347
SHIPPER	ADDRESS	TELEPHONE
International Matex Tank Terminal (IMTT)	5501 Old Osborne Turnpike Richmond, VA 23231	<b>Manager: Shannon Naquin</b> Cell: (b) (6) Hom [REDACTED]
<b>Alternate: George Harris</b>		Phone: 804-226-2650 Cell: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Kinder Morgan (KM2)	4110 Deep Water Terminal Rd. Richmond, VA 23234	<b>Manager: Linda Grady</b> Phone: 804-230-9366 Cell: (b) (6) Hom [REDACTED] Fax: 804-230-4310
<b>Alternate: Robert McKinley</b>		Phone: 804-230-9366 Cell: (b) (6)



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

Richmond Area		
SHIPPER	ADDRESS	TELEPHONE
Kinder Morgan (KME2)	3302 Deep Water Terminal Rd. Richmond, VA 23234	<b>Manager: Linda Grady</b> Phone: 804-291-3285 Cell: (b) (6) Fax: 804-230-1799
SHIPPER	ADDRESS	TELEPHONE
Kinder Morgan (KME)	2000 Trenton Avenue Richmond, VA 23234	<b>Manager: Linda Grady</b> Phone: 804-743-5734 Cell: (b) (6) Hom [REDACTED] Fax: 804-743-5788
SHIPPER	ADDRESS	TELEPHONE
Motiva Enterprises	5801 Jefferson Davis Highway Richmond, VA 23234	<b>Manager: Susan Hornig</b> Phone: 703-259-2083 Cell: (b) (6) Fax: 804-275-6599
SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne	P.O. Box 24567 Richmond, VA 23224  700 Goodes Street Richmond, VA 23224	<b>Manager: Vic Patterson</b> Phone: 804-233-9231 Cell: (b) (6) Hom [REDACTED] Fax: 804-233-9508



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

Roanoke Area		
SHIPPER	ADDRESS	TELEPHONE
Buckeye	P.O. Box 186 Montvale, VA 24122  1070 Terminal Rd. Montvale, VA 24122	<b>Manager: Michael Younce</b> Phone: 703-503-3687 Cell: (b) (6) Fax: 540-947-5393
SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne, Inc. – Atlantic (South – Old Chevron)	P.O. Box 339 Montvale, VA 24122  1147 Oil Terminal Road Montvale, VA 24122	<b>Manager: Joe Williams</b> Phone: 540-947-5158/2251 Cell: (b) (6) Fax: 540-947-2643
SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne, Inc. – Piedmont (North- Old Hess)	P.O. Box 339 Montvale, VA 24122  11685 West Lynchburg Salem Turnpike Montvale, VA 24122	<b>Manager: Joe Williams</b> Phone: 540-947-5013/5004 Cell: (b) (6) Fax: 540-947-2643
SHIPPER	ADDRESS	TELEPHONE
Motiva Enterprises	P.O. Box 385 Montvale, VA 24122  1371 Oil Terminal Rd Montvale, VA 24122	<b>Manager: Susan Hornig</b> Cell: (b) (6) Office: 804-743-0379
SHIPPER	ADDRESS	TELEPHONE
Magellan Terminal Holdings Terminal, LP	P.O. Box 113 Montvale, VA 24122  11851 West Lynchburg-Salem Turnpike Montvale, VA 24122	<b>Manager: Joe R. Tuck</b> Phone: 540-947-2934/2614 Cell: (b) (6) Pager: 540-983-2441 Home: (b) (6) Fax: 540-947-2401



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

Tidewater Area		
SHIPPER	ADDRESS	TELEPHONE
Apex Oil Company	428 Barnes Rd. Chesapeake, VA 23324	<b>Manager: Glenn Hollins</b> Phone: 757-545-4641 Cell: (b) (6) Fax: 757-545-1304
SHIPPER	ADDRESS	TELEPHONE
ARC Terminal	801 Butt Street Chesapeake, VA 23324	<b>Manager: Jim Kippenhan</b> Phone: 757-545-0245 Home: (b) (6) Fax: 757-545-7760
SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne	7600 Halifax Lane Chesapeake, VA 23324	<b>Manager: Mike Steele</b> Phone: 757-545-8455 Cell: (b) (6) Hom [REDACTED] Fax: 757-545-2375
SHIPPER	ADDRESS	TELEPHONE
Kinder Morgan South Hill Terminal	502 Hill Street Chesapeake, VA 23324	<b>Manager: Dee Bell</b> Phone: 757-494-1640 Cell: (b) (6) Fax: 757-543-6798
SHIPPER	ADDRESS	TELEPHONE
Kinder Morgan	4115 Buell Street Chesapeake, VA 23324	<b>Manager: Wayne Nash</b> Phone: 757-494-0479 Fax: 757-494-0460
SHIPPER	ADDRESS	TELEPHONE
Amerada Hess	4030 Buell Street Chesapeake, VA 23324	<b>Manager: Bob Wolfe</b> Phone: 757-543-2061 Cell: (b) (6) Fax: 757-545-5921
SHIPPER	ADDRESS	TELEPHONE
Citgo Petroleum	110 Freeman Ave. Chesapeake, VA 23324	<b>Manager: R.D. Alvis</b> Phone: 757-543-3800 Cell: (b) (6) Fax: 757-543-0737



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

<b>Tidewater Area</b>		
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
IMTT Terminal	2801 S. Military Hwy Chesapeake, VA 23323	<b>Manager: Shannon Naquin</b> Phone: 757-485-3000 Cell: (b) (6) Fax: 757-485-7166
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Craney Island Delivery Facility (DFSC)  Fleet Industrial Supply  Craney Island Fuel Terminal	4501 Cedar Lane Bldg 288 Portsmouth, VA 23703-2071	<b>Manager: Larry Torrey</b> Phone: 757-322-9044 Cell: (b) (6) Fax: 757-322-9046
<b>Alternate: Chris Steele (Trajen, Inc)</b>		Phone: 757-322-9052
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Virginia Power (Gravel C.T.)	5208 Hog Island Rd. Surry, VA 23883	<b>Supervisor: Jeff Daves</b> Phone: 757-365-2480 Cell: (b) (6) Pager: 800-272-5643 PIN 9505 Home: (b) (6) Fax: 757-365-2555
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Plains Refinery	2201 Goodwin Neck Rd. Grafton, VA 23692	<b>Manager: Rich Wilson</b> Phone: 757-898-4766 Fax: 757-898-9636
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
LB & B Associates	C/O US Coastguard Training Center Building 139 Yorktown, VA 23690	<b>Manager: Tony Bowman</b> Phone: (b) (6) 8 Cell: (b) (6) Home: (b) (6) Fax: 757-898-8371



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

<b>Woodbury Area</b>		
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Amerada Hess (Girard Point)	1630 S. 51 <sup>st</sup> Street Philadelphia, PA 19143	<b>Manager: Bill Mantanus</b> Phone: 215-729-7711 Fax: 215-727-1796
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Amerada Hess Corporation (Pennsauken)	123 Deraussee Ave. Pennsauken, NJ 08110	<b>Manager: Brian Clark</b> Phone: 856-663-9000 Emergency# 732-750-6000 Fax: 856-297-3626
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Buckeye Pipeline Company (Laurel/Booth)	3398 Garnet Mine Rd. Boothwyn, PA 19061	<b>Manager: Joe Sobieski</b> Phone: 610-459-3441, x13 Cell: (b) (6) Fax: 610-358-9938 24hr Station Cell: (b) (6)
<b>Alternate: Allen Jones Oper. Super.</b>		Phone: 610-459-3441, x14 Cell (b) (6)
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Sunoco (Eagle Point Refinery)	Route 130 & 295 P.O. Box 1000 Westville, NJ 08093	<b>Manager: Rich Lowery</b> Phone: 856-853-3120 Fax: 856-251-2918
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Duck Island Terminal (Trenton)	1463 Lambertson Rd. Trenton, NJ 08611	<b>Manager: Howard Waldman</b> Phone: 609-393-6899 Cell: (b) (6) Home: (b) (6) Fax: 609-695-2104
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Pacific Atlantic - South	6850 Essington Ave. Philadelphia, PA 19153	<b>Manager: John Willner</b> Phone: 215-492-8000 Cell: (b) (6) Fax: 215-937-6420
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Pacific Atlantic - Paulsboro	3 <sup>rd</sup> & Billingsport Rds Paulsboro, NJ 08066	<b>Manager: John Willner</b> Phone: 856-423-3432, x115 Cell: (b) (6) Fax: 856-423-5889
<b>Alternate: Frank Snyder, Area Mgr.</b>		Phone: 856-423-3432



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

<b>Woodbury Area</b>		
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Pacific Atlantic - North	67 <sup>th</sup> Street & Schuylkill River Philadelphia, PA 19153	<b>Manager: John Willner</b> Phone: 215-492-8000 Cell: (b) (6) Fax: 215-492-6320
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Consumer Oil (Trenton)	1473 Lamberton Rd. Trenton, NJ 08611	<b>Manager: Bill Thompson</b> Phone: 609-396-1597 Cell: (b) (6) Home: (b) (6) Fax: 609-394-8140
<b>Alternate: Peter Kirk</b>		Cell: (b) (6)
<b>Alternate: Stacy Feinberg, President</b>		Cell: (b) (6)
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
PBR Refinery – Paulsboro (Old Valero/Mobil)	800 Billingsport Rd. Paulsboro, NJ	<b>Manager: Dean McKee</b> Phone: 856-224-6005 Cell: (b) (6) Fax: 856-224-4189
<b>Alternate: Steve Gray, Unit Super.</b>		Phone: 856-224-6123 Cell: (b) (6)
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Sun Oil Company (Philadelphia Refinery)	3144 Passyunk Ave. Philadelphia, PA 19145	<b>Blending &amp; Shipping Superintendent: Walter Bush</b> Phone: 215-339-7297 Fax: 215-339-7168
<b>Alternate: Refinery Shift Supervisor</b>		Phone: 215-339-7126 (24 Hr.) Cell: (b) (6)
<b>SHIPPER</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
ARFA Oil (Girard Point)	6300 W. Passyunk Ave. Philadelphia, PA 19153	<b>Manager: John Wehrman</b> Office: 215-399-7599 Office: #2: 267-283-0030 Cell: (b) (6) Fax: 215-365-5758 Home: (b) (6)



# Colonial Pipeline Company

## LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

### Northeast

#### Woodbury Area

SHIPPER	ADDRESS	TELEPHONE
Harbor Pipeline (Adjacent Pipeline) (Sun/Coastal/Tosco)	950 Jessup Road Thorofare, NJ 08086	<b>Manager: John Legge</b> Phone: 215-205-8199 24 Hr: 856-384-3019 Fax: 215-937-6270

#### Woodbury Area

SHIPPER	ADDRESS	TELEPHONE
Conoco-Phillips/Buckeye– Girard Point (Chelsea Tank Farm – Tosco)	3398 Garnet Mine Road Aston, PA 19014	<b>Manager: Pete Pirog</b> Phone: 610-619-6225 Cell: (b) (6) 24hr Station Cell: (b) (6) Fax: 610358-9938



# Colonial Pipeline Company

## NED RESPONSE ZONE

### EMERGENCY CARE FACILITIES

(Facilities listed are located along Colonial Pipeline's ROW)

Facility Name	Address	City, State, Zip Code	Telephone No.
<i>Virginia Area</i>			
Sentara Norfolk General Hospital	600 Gresham Dr,	Norfolk, VA 23507	(757) 388-3000
Ambulatory Surgical Center	838 Kempsville Rd	Norfolk, VA 23502	(757) 466-6900
Carilion Roanoke Memorial Hospital	1906 Belview Ave	Roanoke, VA 24014	(540) 981-7000
Henrico Doctor's Hospital - Parham	777 E. Parham Road	Richmond, VA 23294	(804) 747-5770
Henrico Doctor's Hospital	1620 Skipwith Road	Richmond, VA 23226	(804) 289-4500
St. Mary's Hospital of Richmond	5801 Bremon Road	Richmond, VA 23226	(804) 285-2011
Virginia Commonwealth University Health System	1250 East Marshall Street	Richmond, VA 23298	(804) 828-9000
University VA Health Systems	1215 Lee St	Charlottesville, VA 22908	(434) 924-0211
Culpeper Regional Hospital	501 Sunset Lane	Culpeper, VA 22701-1798	(540) 829-4100
Inova Fair Oaks Hospital	3600 Joseph Siewick Dr	Fairfax, VA 22033-1798	(703) 391-3600
Fairfax Hospital	3300 Gallows Road	Falls Church, VA 22042	(703) 698-1110
Fauquier Hospital	500 Hospital Drive	Warrenton, VA 20186-3099	(540) 316-1313
Potomac Hospital	2300 Opitz Blvd	Woodbridge, VA 22191	(703) 670-1313
<i>Maryland Area</i>			
Baltimore Washington Medical	301 Hospital Drive	Glen Burnie, MD 21061-5803	(410) 787-4000
Harbor Hospital	3001 S. Hanover St	Brooklyn, MD 21225-1290	(410) 350-3200
Maryland General Hospital	827 Linden Avenue	Baltimore, MD 21201-4606	(410) 225-8000
The Johns Hopkins Hospital	600 N. Wolfe Street	Baltimore, MD 21205	(410) 955-5080
Kernan Hospital	2200 Kernan Drive	Baltimore, MD 21207-6697	(410) 448-2500
Saint Agnes Hospital	900 S. Caton Avenue	Baltimore, MD 21229-5299	(410) 368-6000
Harford Memorial Hospital	501 S. Union Avenue	Havre De Grace, MD 21078	(443) 842-5000
Union Hospital	106 Bow Street	Elkton, MD 21921-5596	(302) 731-01743
<i>Delaware Area</i>			
Christiana Care Christiana Hospital	4755 Ogletown-Stanton Rd	Newark, DE 19718	(302) 733-1000
Wilmington Hospital	501 W 14 <sup>th</sup> Street	Wilmington, DE 19801-1038	(302) 428-4250
St. Francis Hospital	701 Clayton Street	Wilmington, DE 19805-3155	(302) 421-4100



# Colonial Pipeline Company

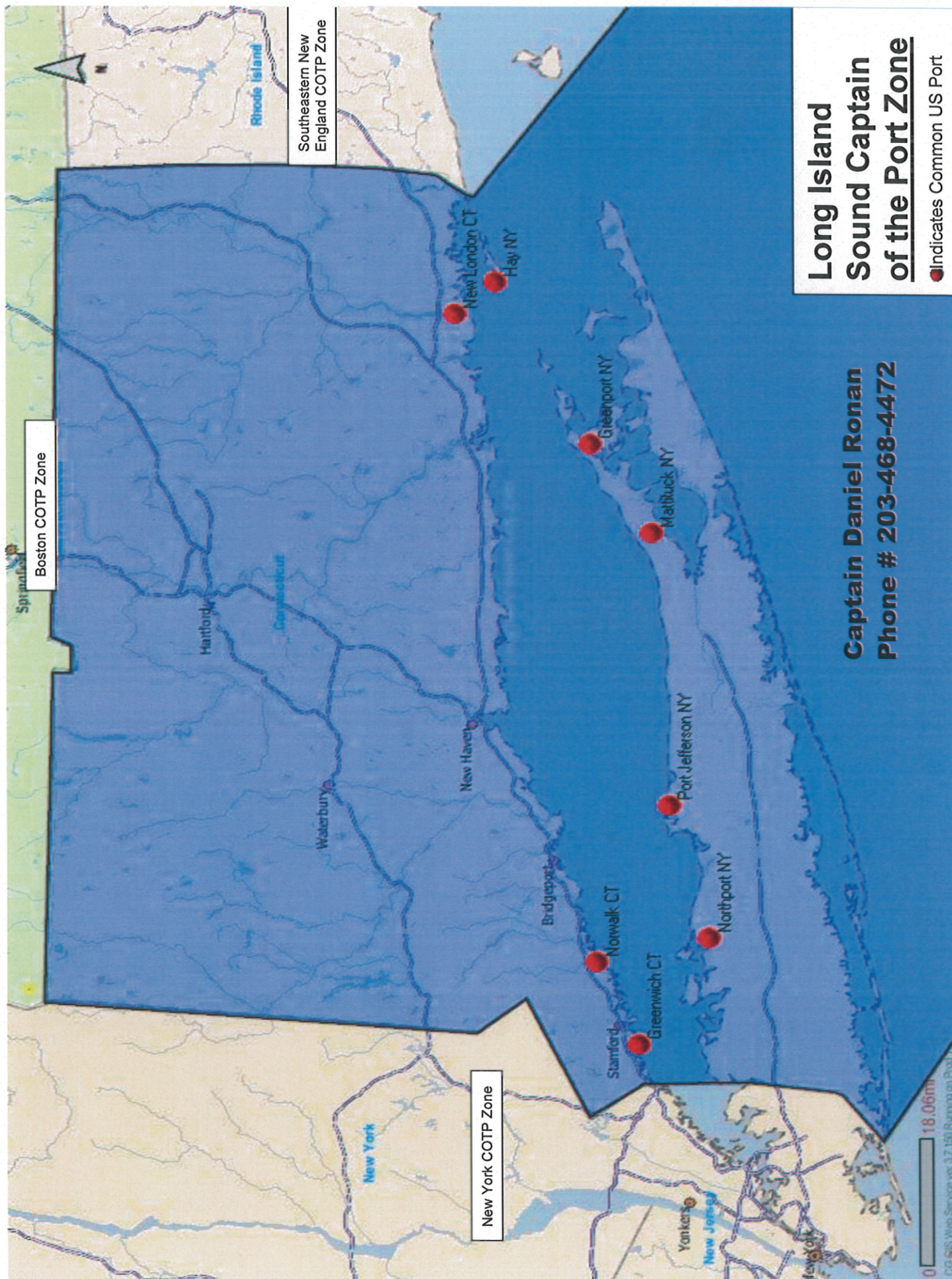
## NED RESPONSE ZONE

### EMERGENCY CARE FACILITIES

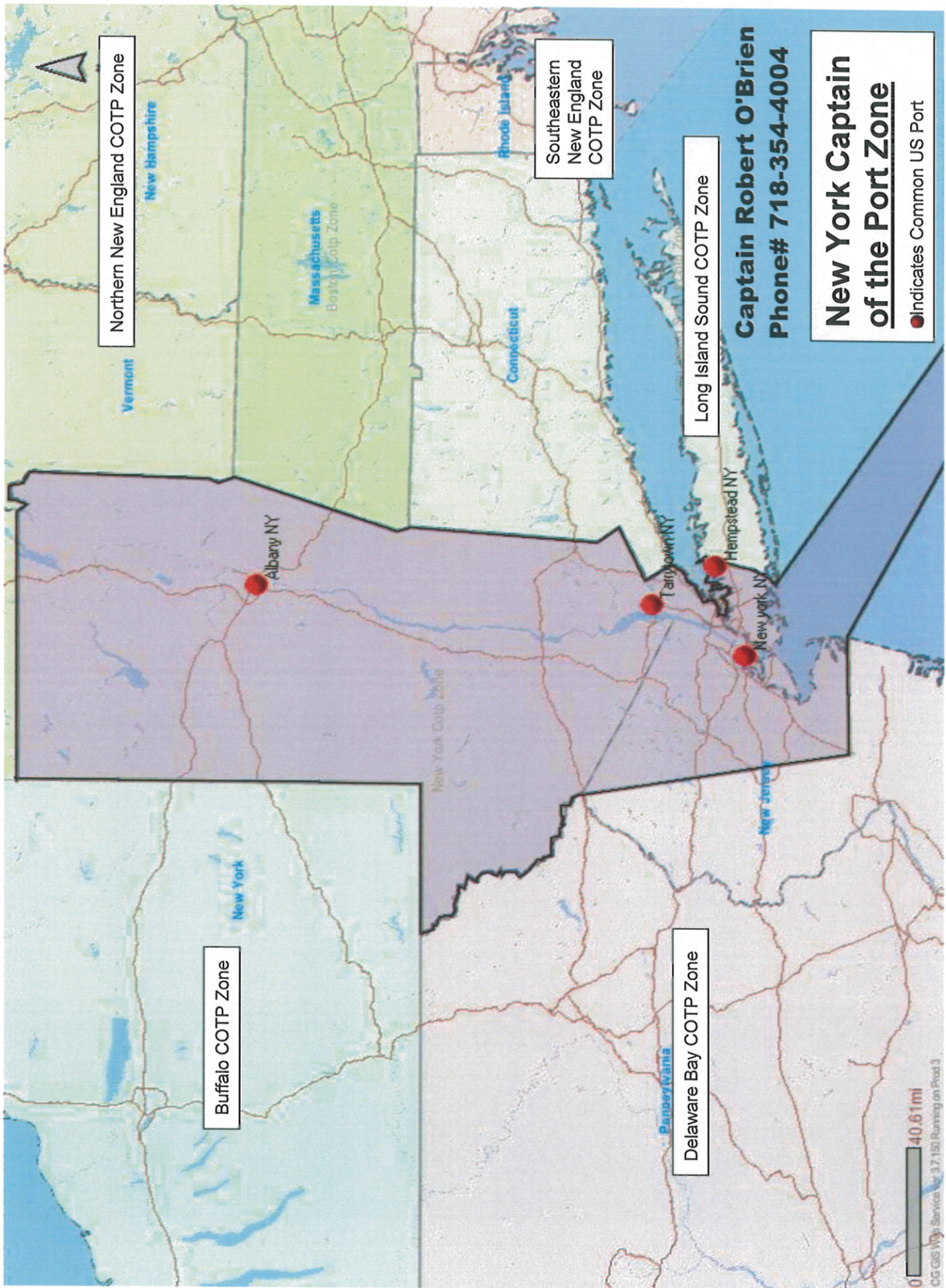
(Facilities listed are located along Colonial Pipeline's ROW)

Facility Name	Address	City, State, Zip Code	Telephone No.
<i>Pennsylvania Area</i>			
Crozer-Chester Medical Center	One Medical Ctr Blvd	Upland, PA 19013	(610) 447-2000
Pennsylvania Hospital	800 Spruce Street	Philadelphia, PA 19107-6192	(215) 829-3000
<i>New Jersey Area</i>			
Underwood Memorial Hospital	509 Broad Street	Woodbury, NJ 08096-1697	(856) 845-0100
Cooper University Hospital	1 Cooper Plaza	Camden, NJ 08103	(856) 966-4261
Our Lady of Lourdes Medical Center	1600 Haddon Avenue	Camden, NJ 08103	(856) 966-6737
Kennedy Health System	2201 Chapel Avenue	Cherry Hill, NJ 08002-2048	(856) 488-6500
Virtua-memorial Hospital Burlington Co.	30 High Street	Mt. Holly, NJ 08060-1702	(609) 271-7045
Robert Wood Johnson University Hospital Hamilton	1 Hamilton Health Place	Hamilton, NJ 08690-3599	(609) 586-7900
Rutgers University Hospital	11 Bishop Place	New Brunswick, NJ 08901	(732) 932-7401
Raritan Bay Medical Center	530 New Brunswick Ave	Perth Amboy, NJ 08861-3685	(732) 442-3700
Robert Wood Johnson University Hospital at Rahway	856 Stone Street	Rahway, NJ 07065-2742	732-381-4200
UMDNJ-University Hospital	1600 Bergen Street	Newark, NJ 07103	(973) 972-4300
<i>New York Area</i>			
Staten Island University Hospital - South Division	375 Seguin Avenue	Staten Island, NY 0309-3932	(718) 226-2000
Staten Island University Hospital	427 Seaview Avenue	Staten Island, NY 10305	

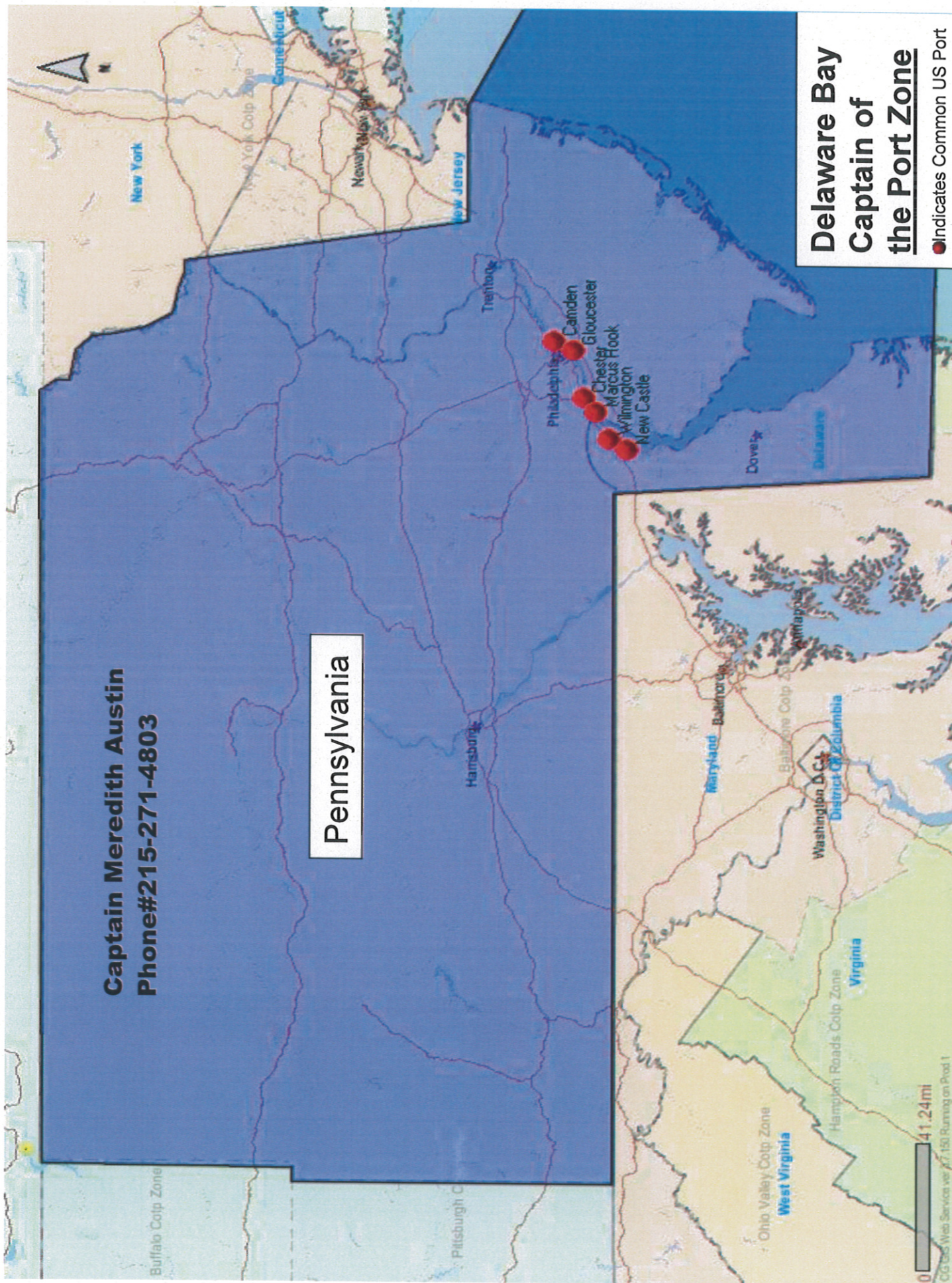




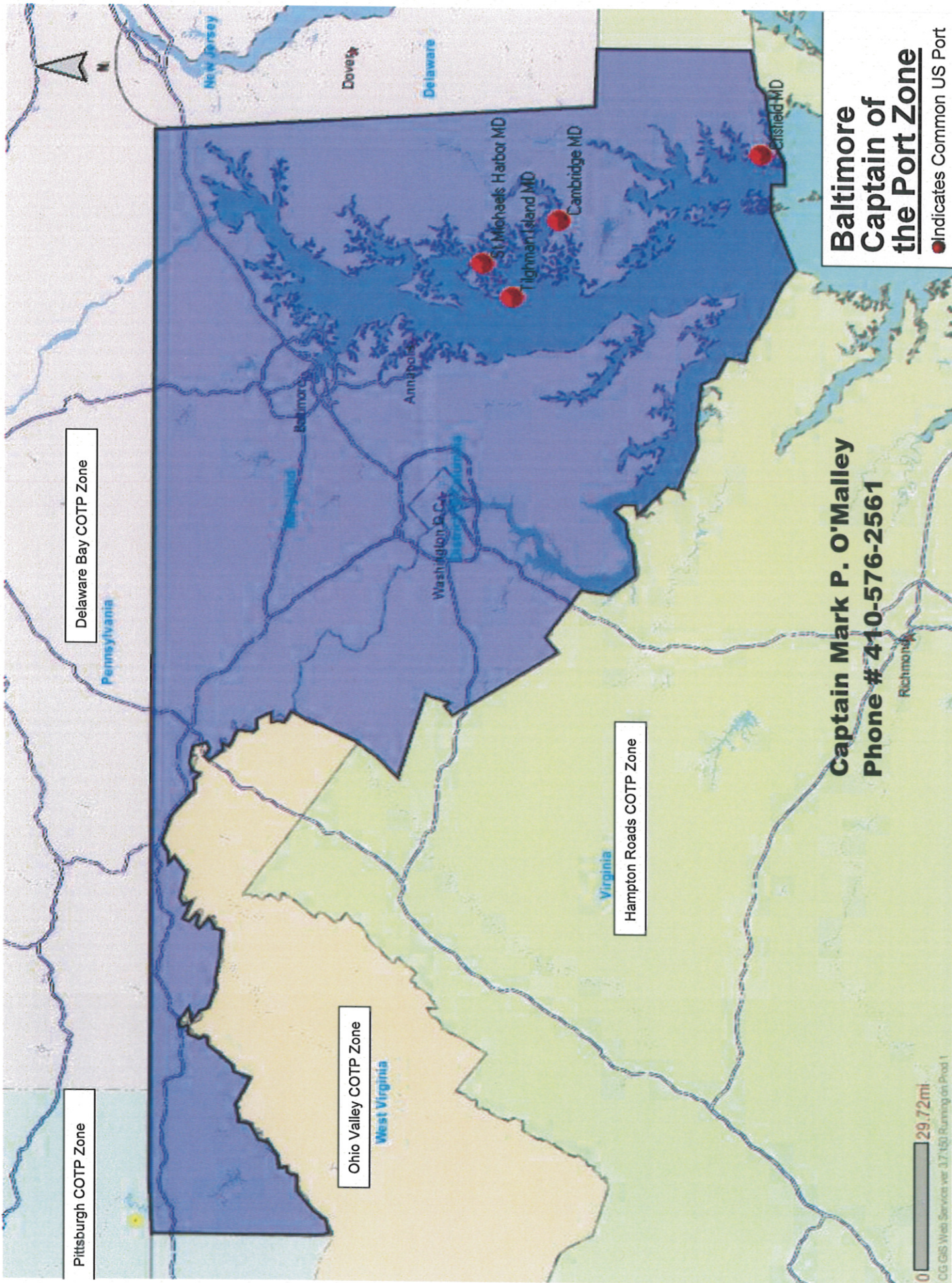










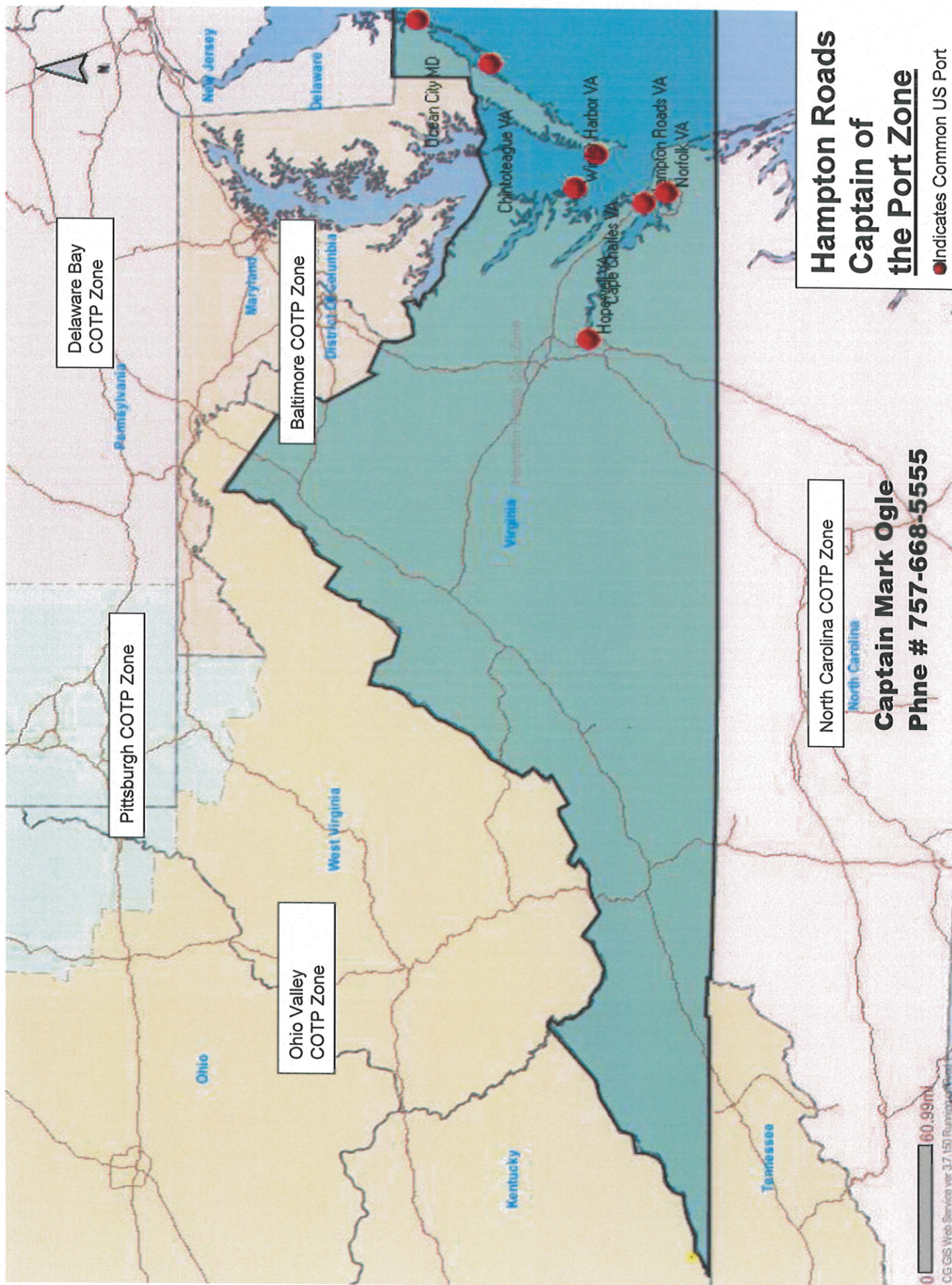


**Baltimore  
Captain of  
the Port Zone**

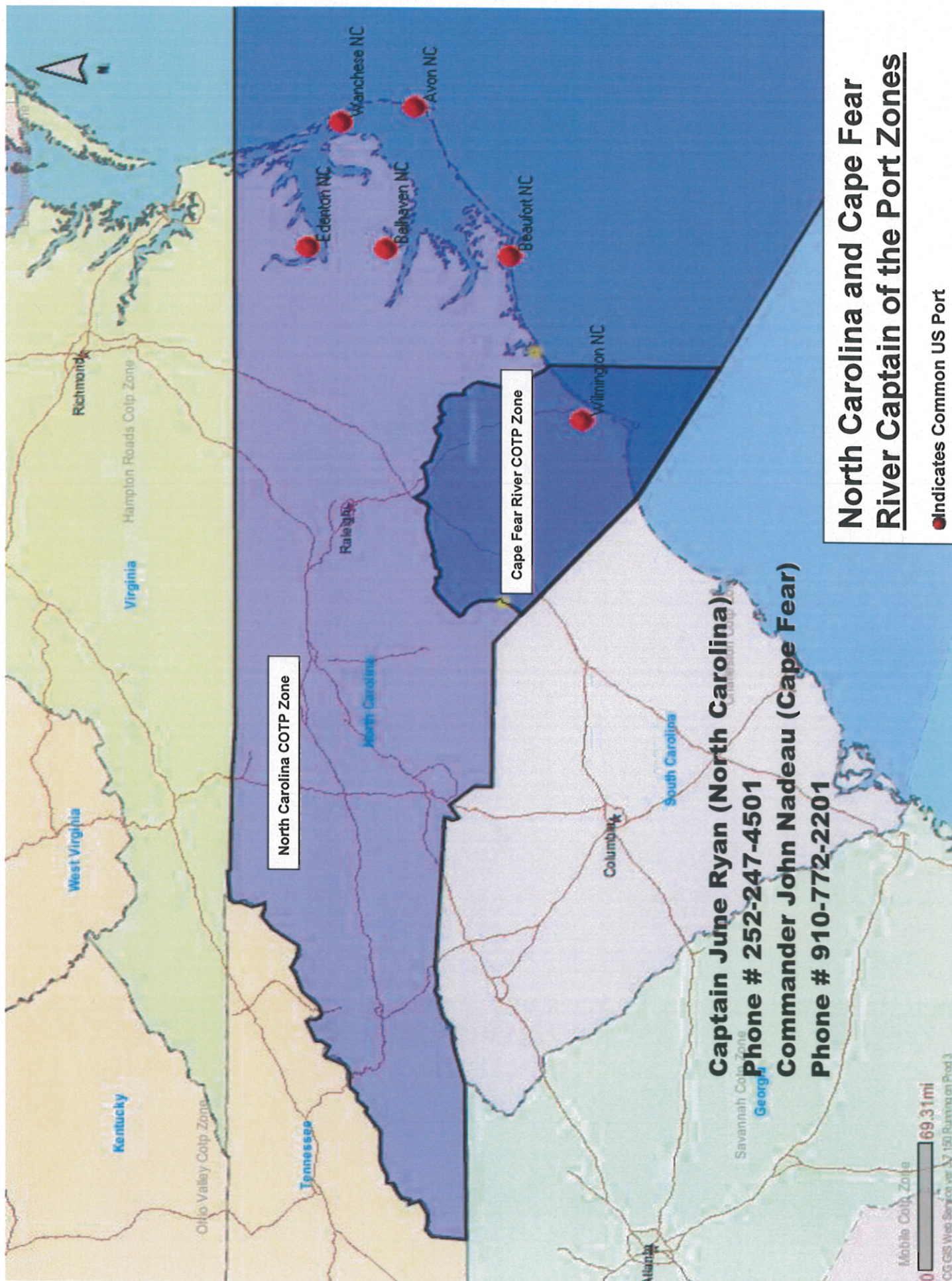
● Indicates Common US Port

**Captain Mark P. O'Malley**  
**Phone # 410-576-2561**

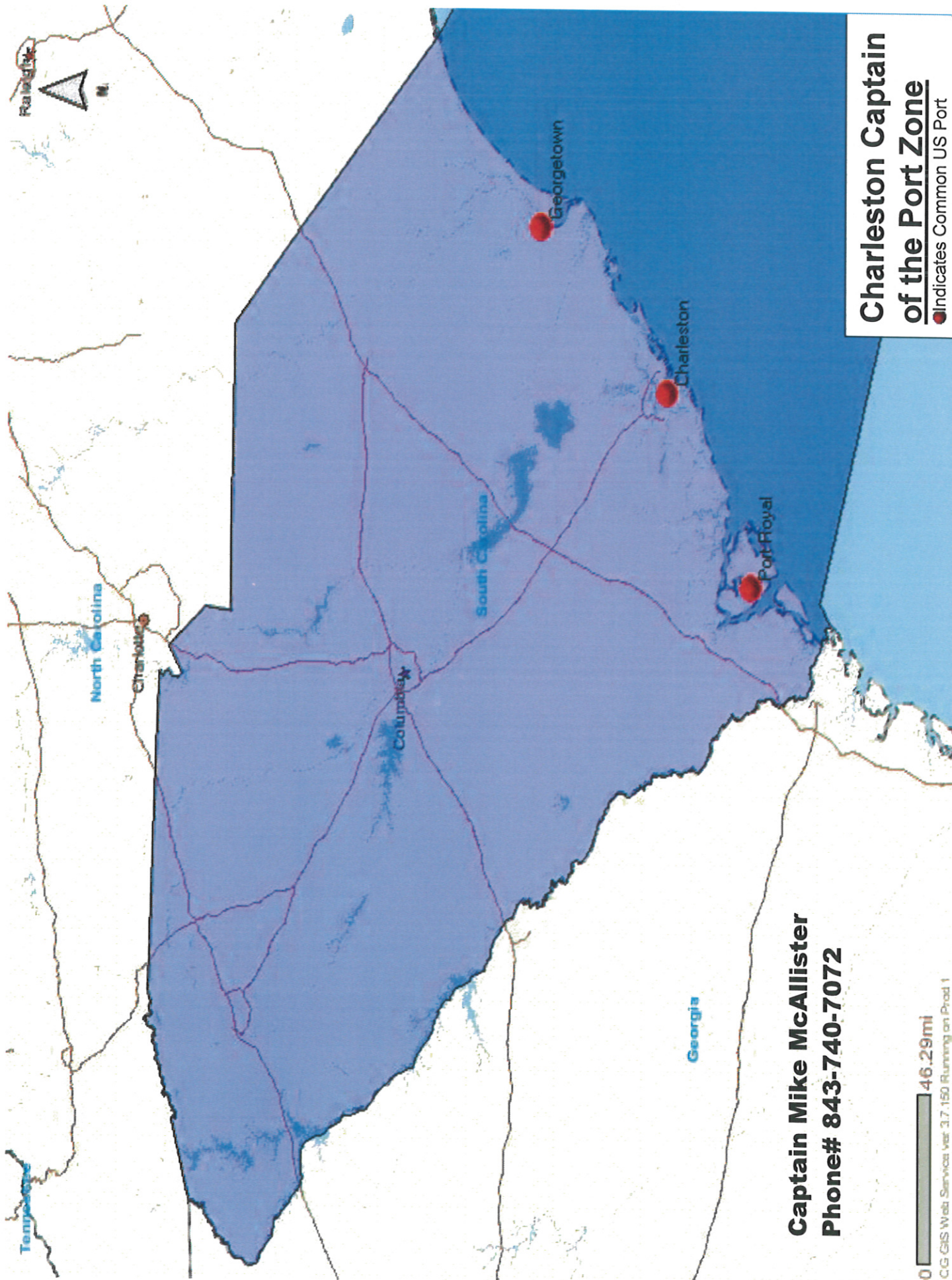




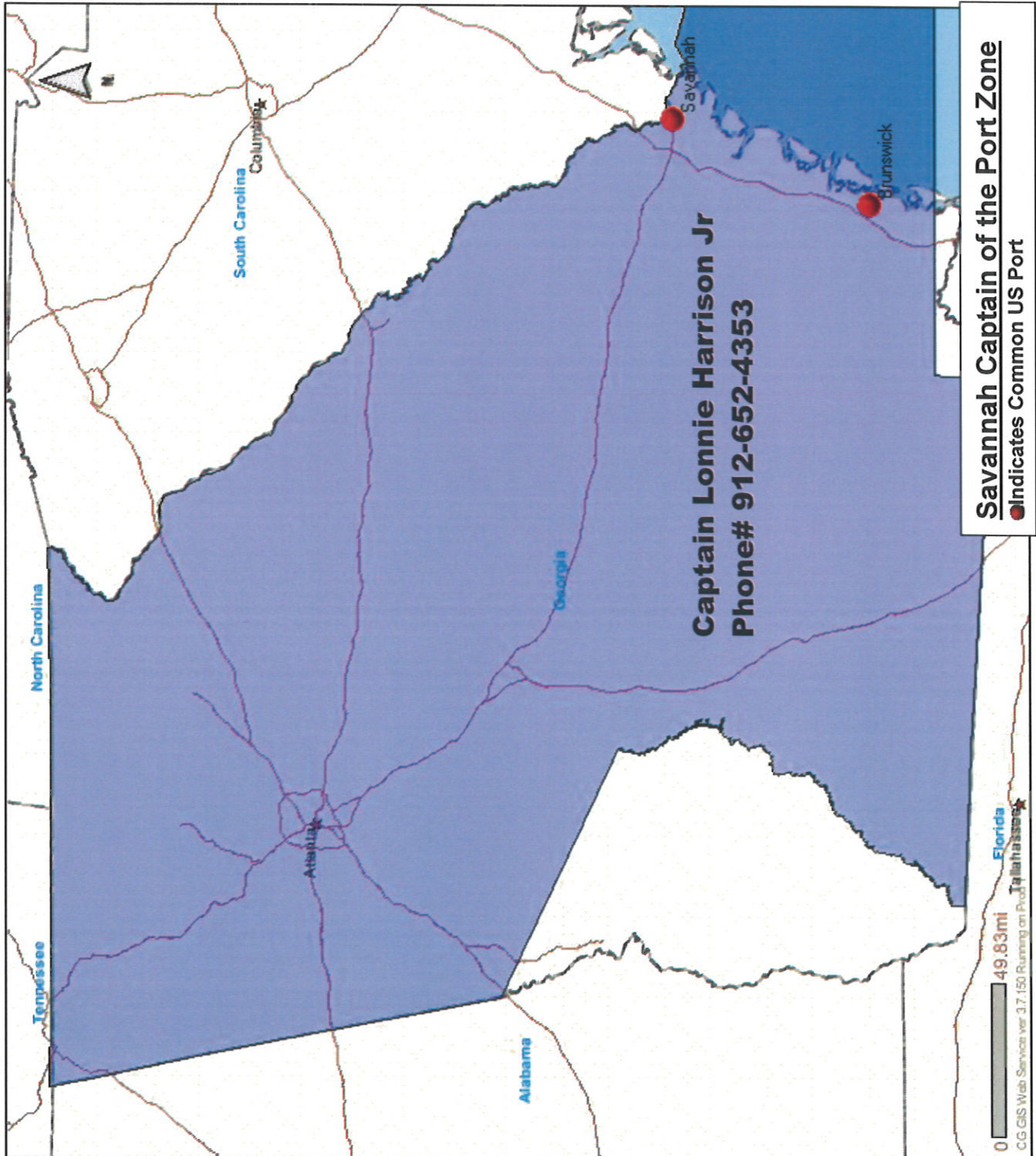




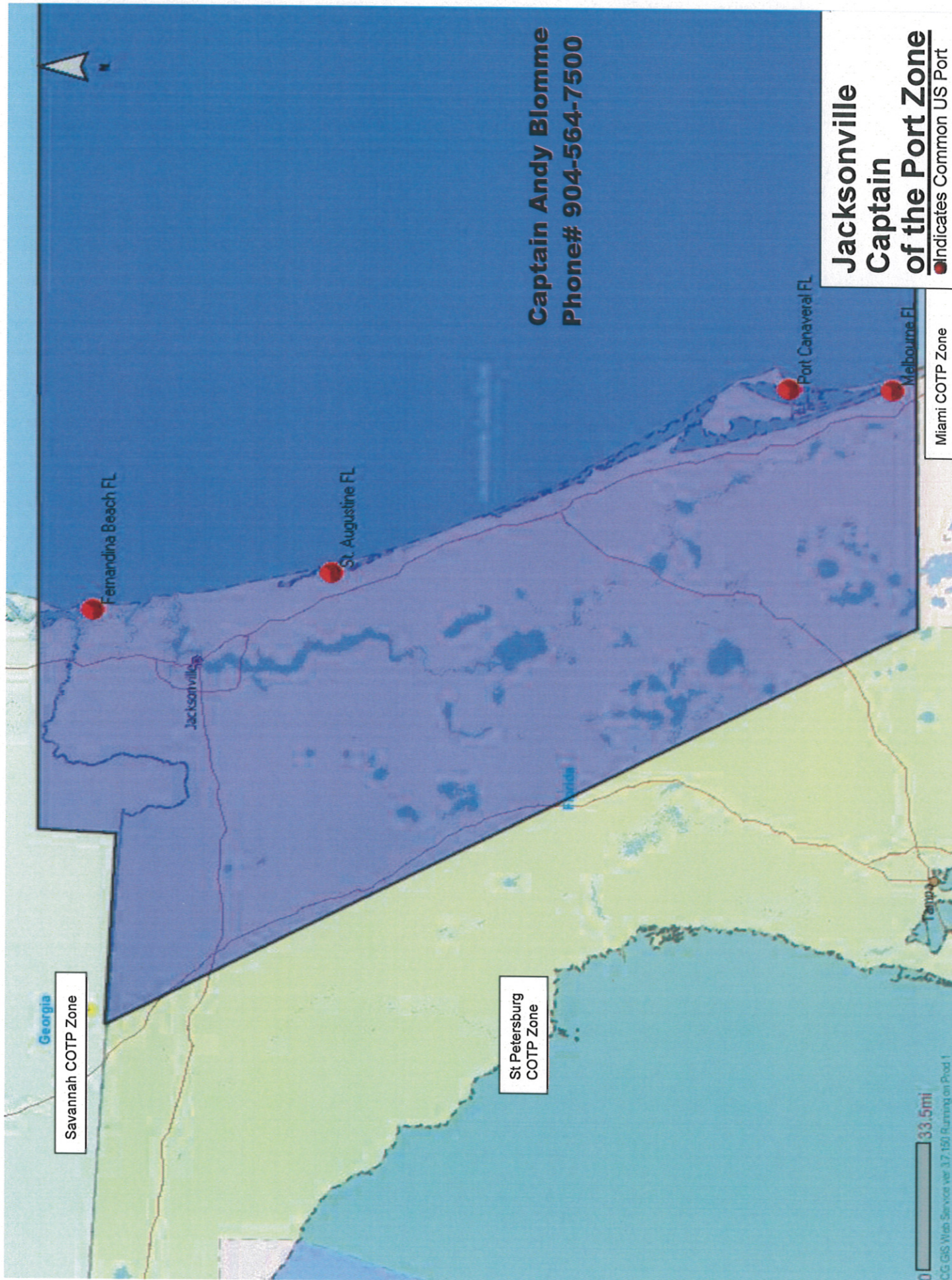




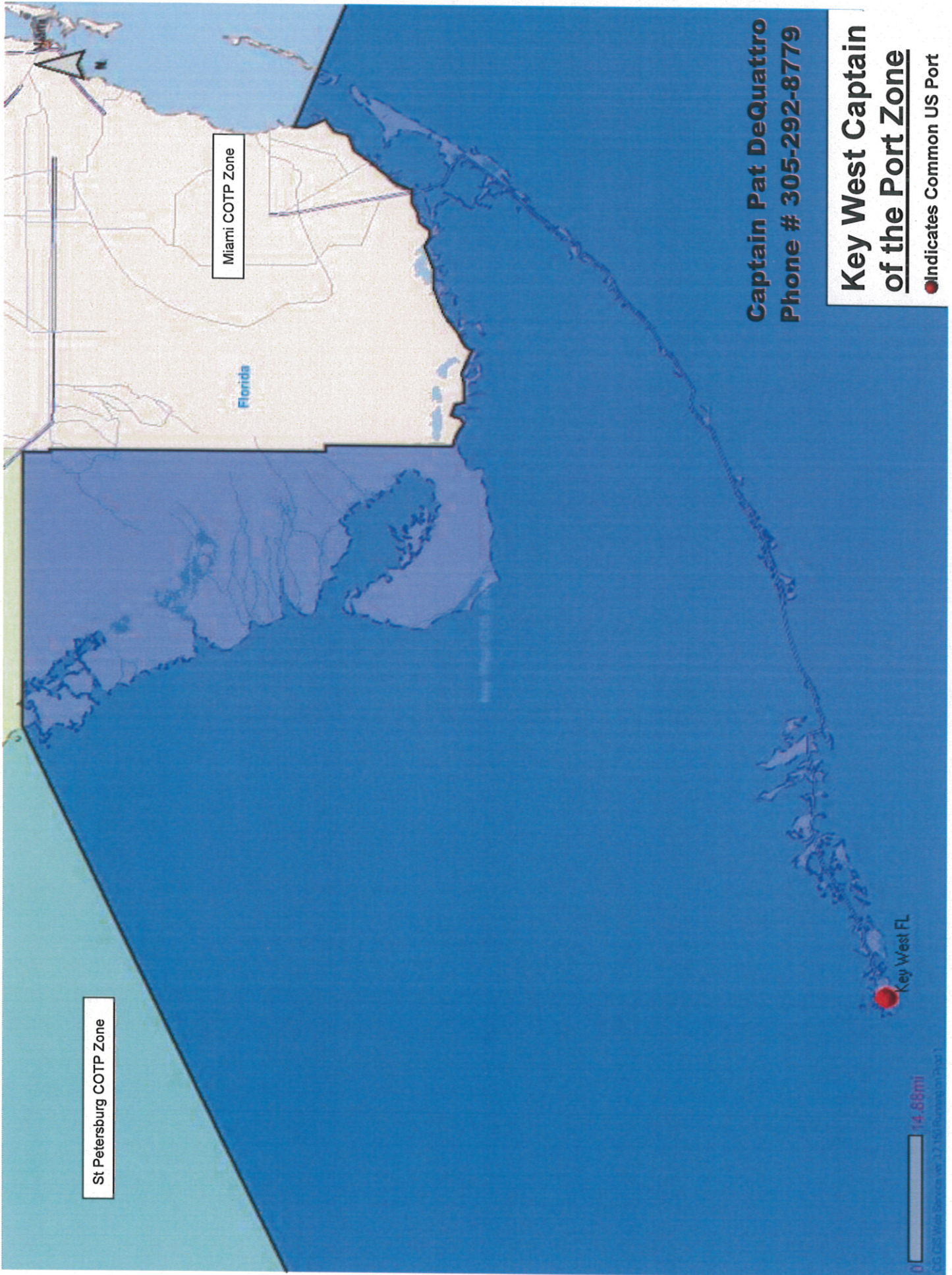










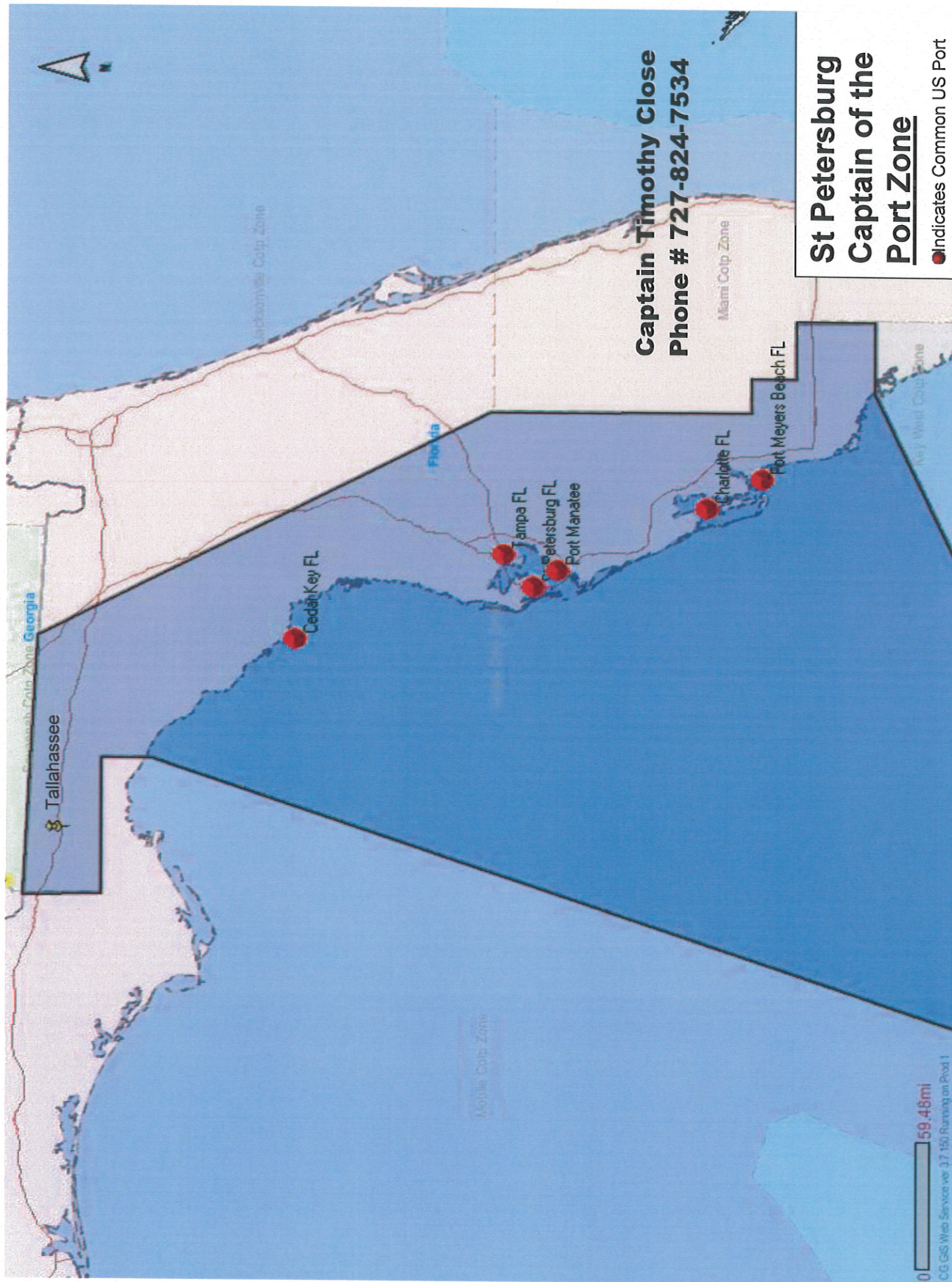


**Captain Pat DeQuattro**  
**Phone # 305-292-8779**

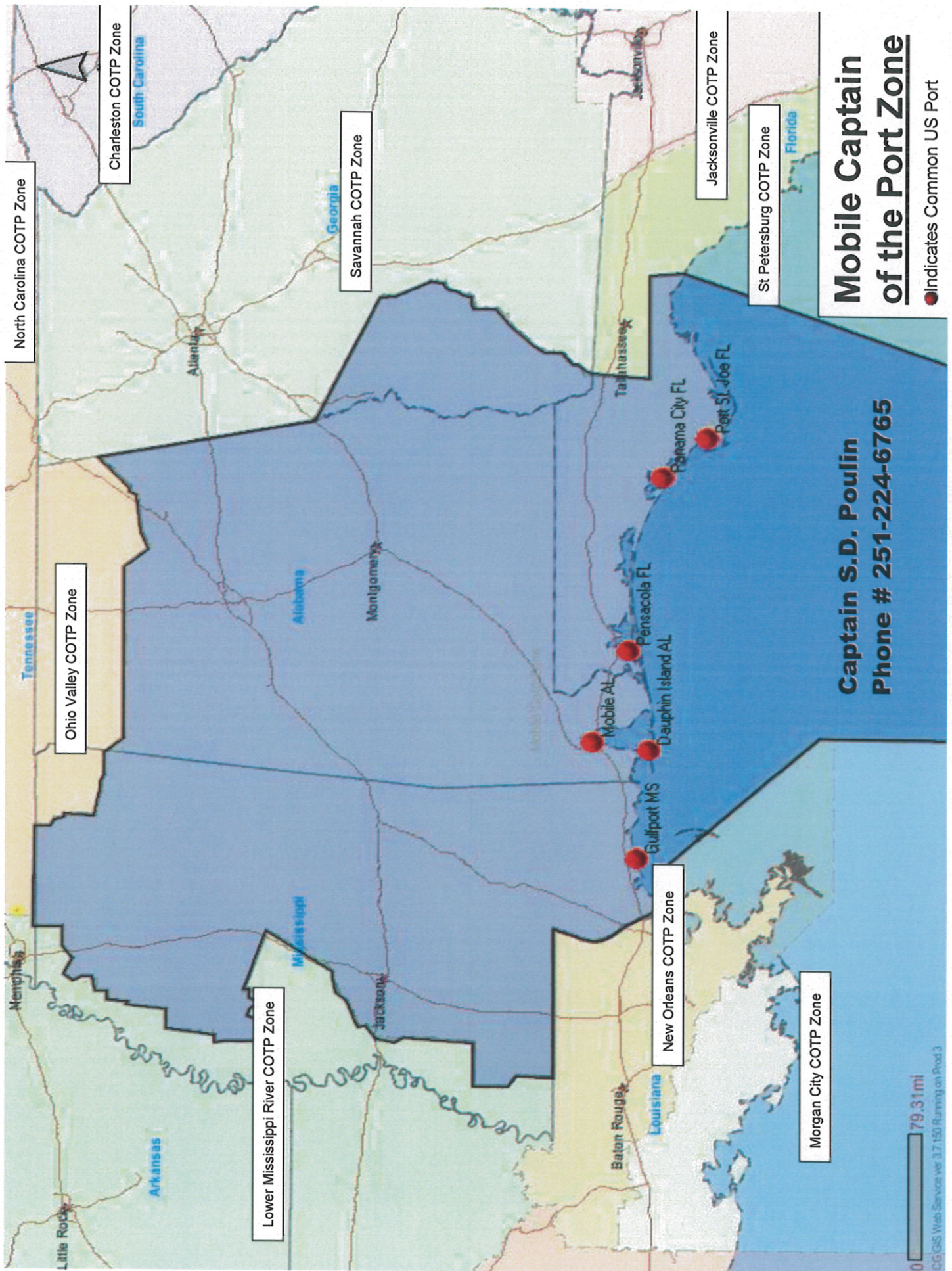
**Key West Captain  
of the Port Zone**

● Indicates Common US Port











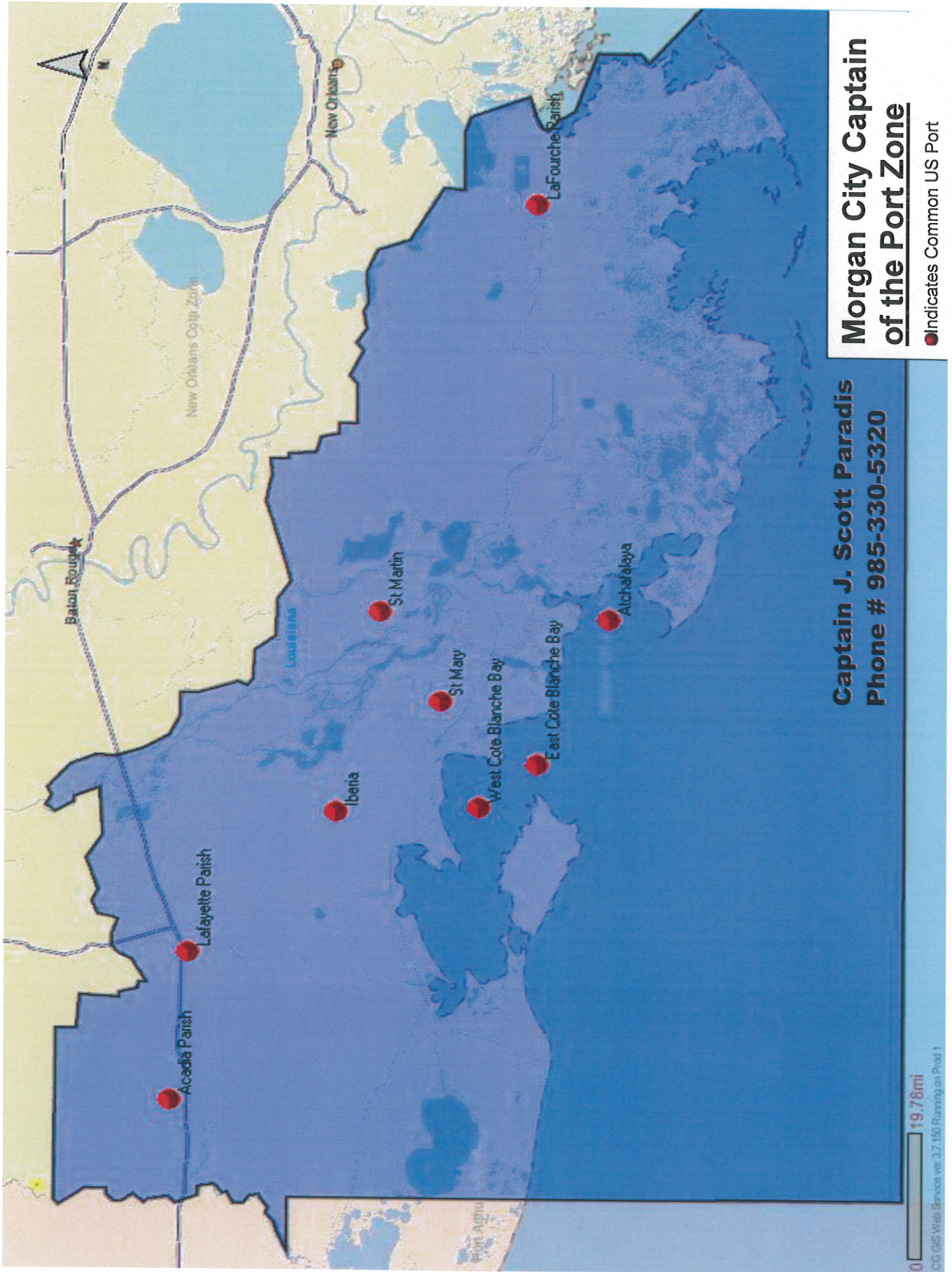
## New Orleans Captain of the Port Zone

● Indicates Common US Port

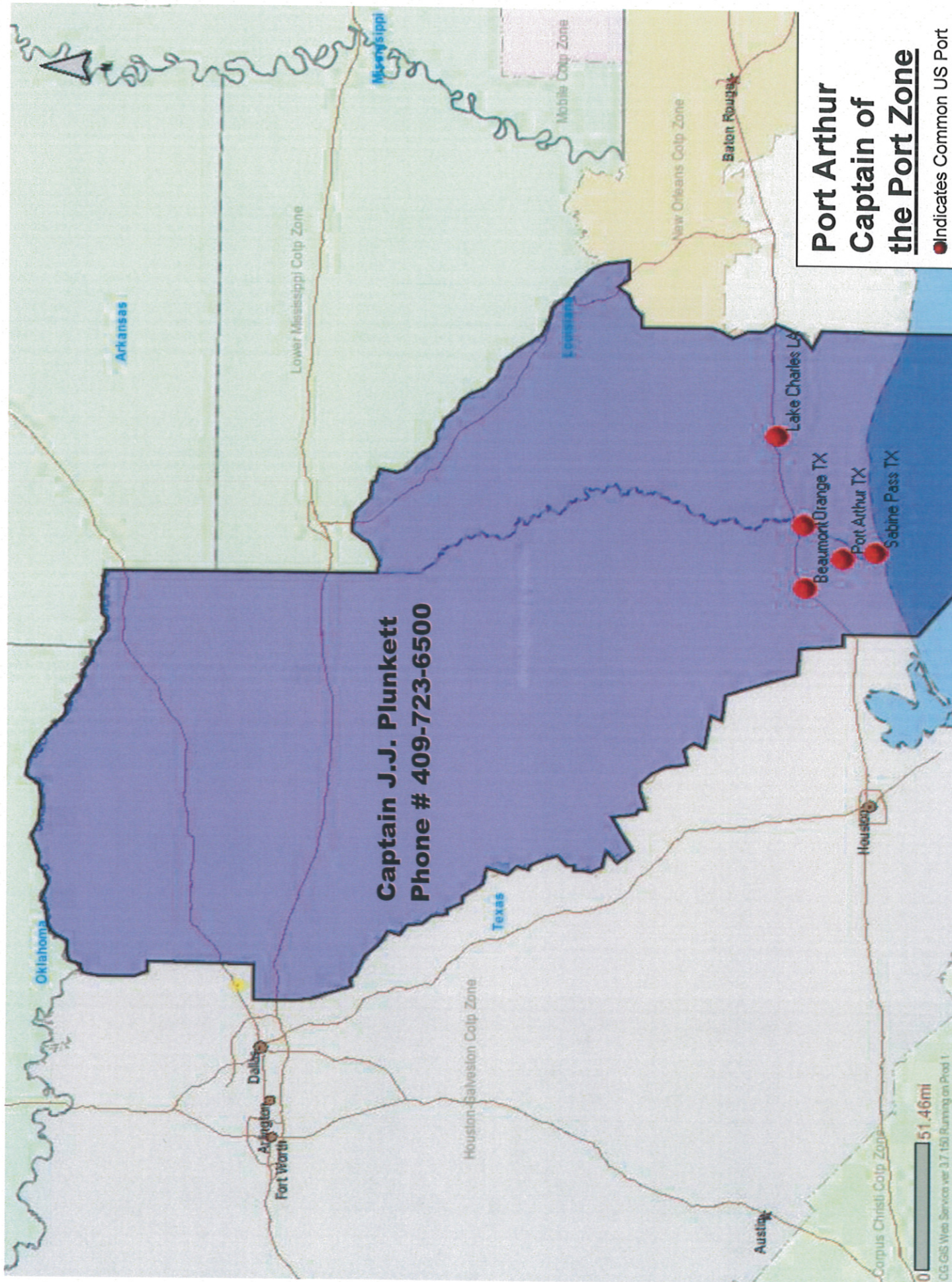
**Captain Edwin M. Stanton**  
**Phone # 504-589-6196**

31.38mi









**Captain J.J. Plunkett**  
**Phone # 409-723-6500**

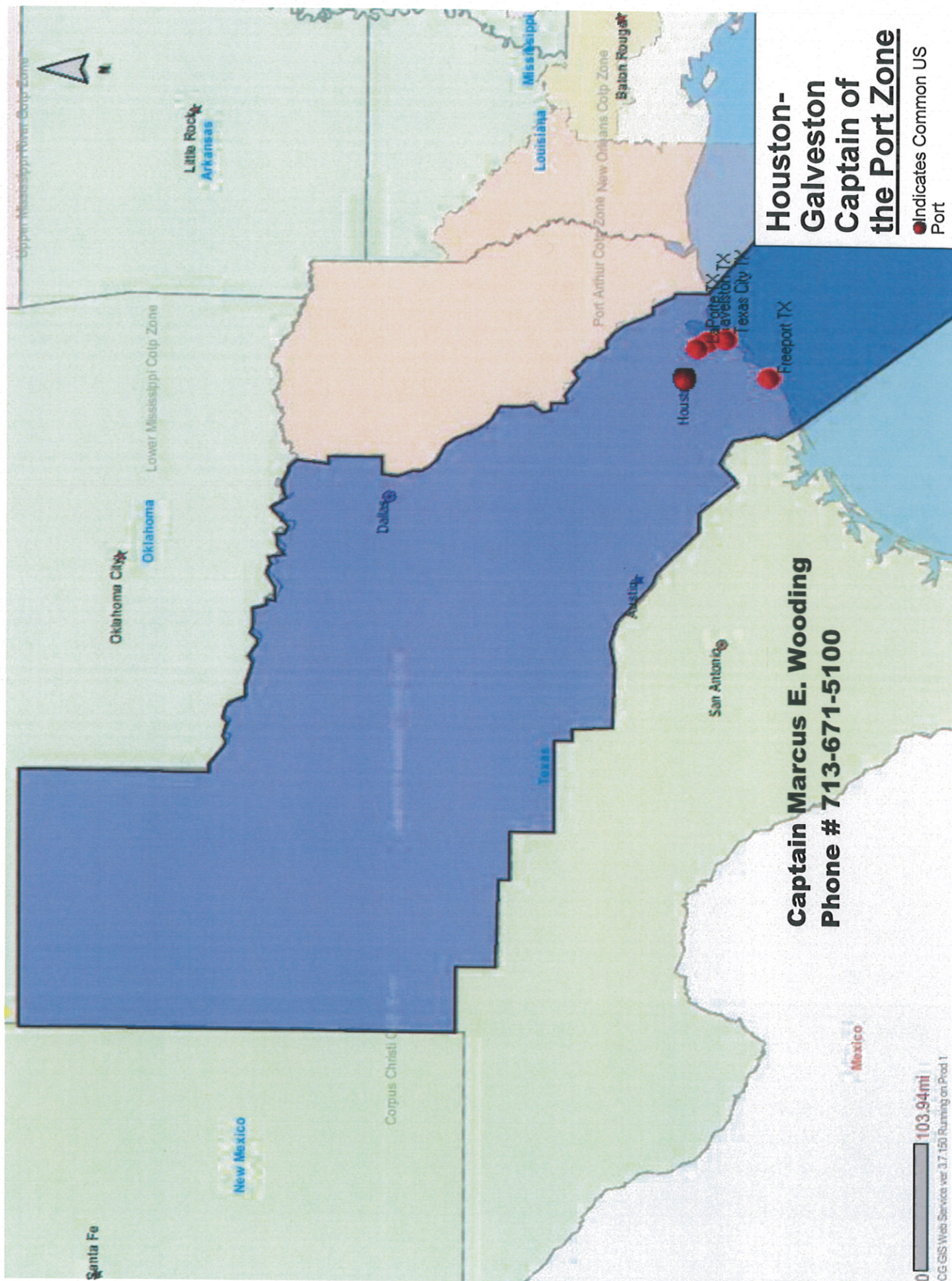
**Port Arthur  
 Captain of  
 the Port Zone**

● Indicates Common US Port

0 51.46mi

CG GIS Web Services ver 3.7.150 Running on Prod 1





# Houston- Galveston Captain of the Port Zone

● Indicates Common US Port

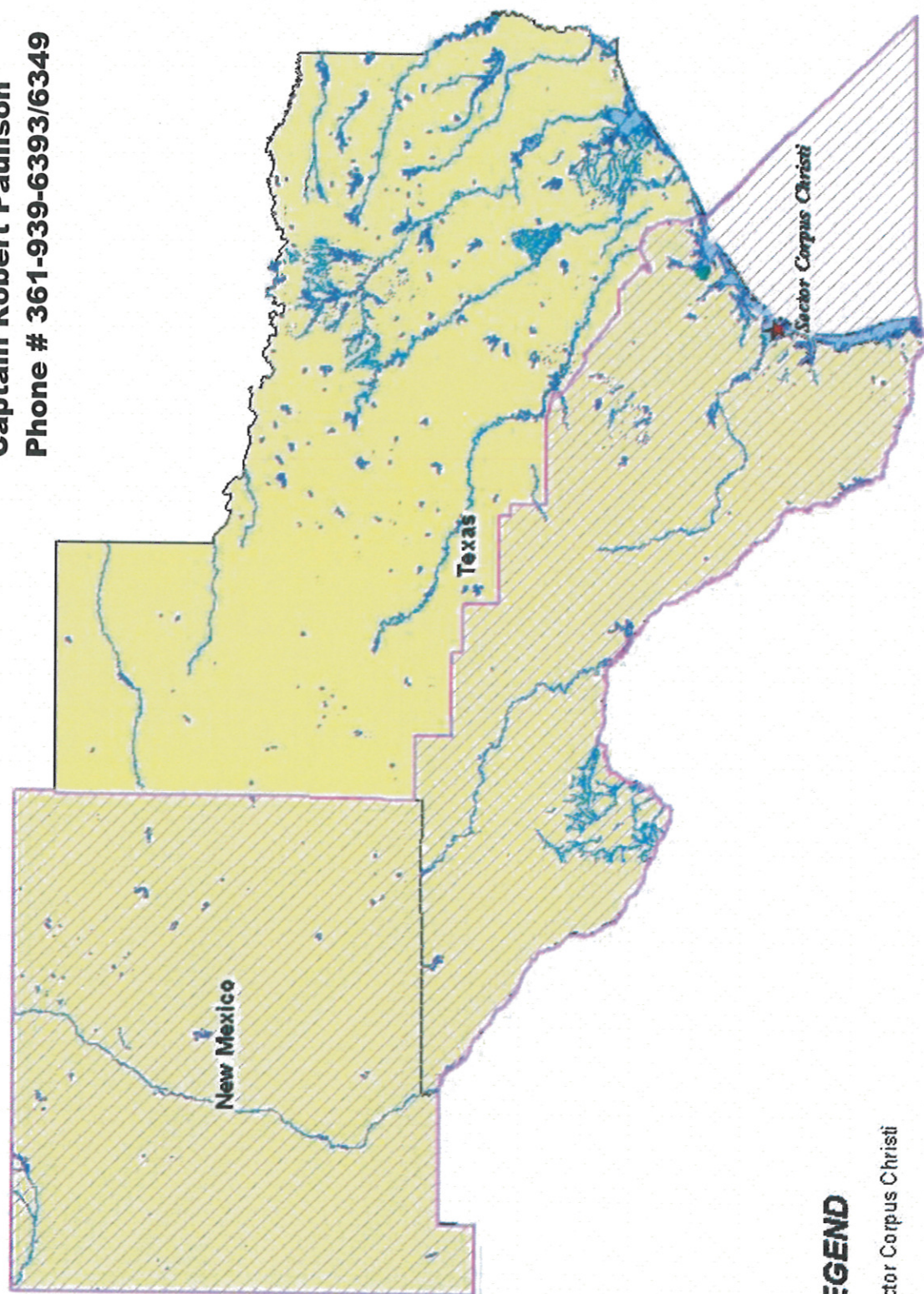
**Captain Marcus E. Wooding**  
**Phone # 713-671-5100**






# Sector Corpus Christi

**Captain Robert Paulison**  
**Phone # 361-939-6393/6349**



## LEGEND

 Sector Corpus Christi

0 150 60 90 120 Nautical Miles



# Colonial Pipeline Company

## TRAINING

Colonial personnel who are likely to respond to an emergency situation will be trained commensurate to 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 timeframe. 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."<sup>1</sup> "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."<sup>2</sup>

<sup>1</sup> <http://www.osha.gov/html/fag-hazwoper.html>

<sup>2</sup> [http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=INTERPRETATIONS&p\\_id=24759](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 5 levels of hazwoper training:

- 1<sup>st</sup> 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.
- 1<sup>st</sup> 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



# Colonial Pipeline Company

## TRAINING

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 4 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 & 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 3 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:

- 1) Attending a hazwoper classroom refresher training session
- 2) Attending Strike Team classroom training
- 3) 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.



# Colonial Pipeline Company

## TRAINING

### **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 Mgr
- Branch Director
- Wildlife Unit Leader
- Salvage/Source Control Unit Leader
- Observer

### **Training Opportunities**

Colonial offers a variety of emergency response training opportunities, including 24-hr hazwoper, 8-hr 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



# Colonial Pipeline Company

## TRAINING

### **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 = 1<sup>st</sup> 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 documentaton 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.



# Colonial Pipeline Company

## Exercise Program

### 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 3 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 3 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.



# Colonial Pipeline Company

## Exercise Program

### **Strike Team Tabletop Exercise**

#### **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 3 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 3 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



# Colonial Pipeline Company

## Exercise Program

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 3 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 3 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 3 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



# Colonial Pipeline Company

## Exercise Program

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 15 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 RSPA 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



# Colonial Pipeline Company

## Exercise Program

### Certification

The Incident commander for the actual response must certify that the response meets the credit requirements for the identified exercises and plan components.

### 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 3 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 3 year cycle:

1. Notification
2. Staff mobilization
3. Ability to operate within the response management system of the ERP
4. Discharge control
5. Assessment of discharge
6. Containment of discharge
7. Recovery of spilled material
8. Protection of sensitive areas
9. Disposal of recovered material and contaminated debris
10. Communications
11. Transportation
12. Personnel support
13. Equipment maintenance and support
14. Procurement
15. 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



# Colonial Pipeline Company

## Exercise Program

- Objectives met in the exercise
- Components of the response plan exercised
- Components of the 15 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 position 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 3 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.



# Triennial Cycle Documentation Form

\_\_\_\_\_ Response Zone

Compliance Cycle: 2010 - 2012

	Exercise Category						Core Components														
	QL 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
<b>2010</b>																					
1st Qtr.																					
2nd Qtr.																					
3rd Qtr.																					
4th Qtr.																					
<b>2011</b>																					
1st Qtr.																					
2nd Qtr.																					
3rd Qtr.																					
4th Qtr.																					
<b>2012</b>																					
1st Qtr.																					
2nd Qtr.																					
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	respnd to 15 minute follow up	back up called	back up respond	notes

**Non Primary**

Name	respond w/in 15 minutes	respnd to 15 minute follow up	back up called	back up respond	notes



# 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)

### **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 thru 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?



# Colonial Pipeline Company

- 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 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?



# Colonial Pipeline Company

- 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 3<sup>rd</sup> 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?



# Colonial Pipeline Company

- 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***



# Colonial Pipeline Company

- 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?



# Colonial Pipeline Company

**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**











## **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 30 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.



# Colonial Pipeline Company

## PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

In addition, the District Administrative Assistants will update the following Sections of the Plan and notify response personnel within 30 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



# Colonial Pipeline Company

## PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

- 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



# Colonial Pipeline Company

## PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

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



# Colonial Pipeline Company

## PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

### 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
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



# Colonial Pipeline Company

## PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

Owner	Section	District/Generic	Contents
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
Operation Managers	9.03	District	Block valve locations
Safety & Security Leader	9.01	Generic	Product characteristics & MSDS 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: \_\_\_\_\_

<i>For District Office Use Only</i> <i>(to be completed by the District AA)</i>	
<i>Date Received</i>	



# 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 30 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:



# Colonial Pipeline Company

## Document Control Procedures

- 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 & Associate OM's
- Project Leaders
- Project Managers & 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.



## 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

<u>Product</u>	<u>Minimum Flash Point Range, F</u>
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.

### **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:

### **DISTILLATION RANGES OF REFINED PRODUCTS**

<u>Product</u>	<u>Distillation Range, F</u>
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**

<u>Product</u>	<u>API Gravity</u>	<u>Specific Gravity</u>	<u>Density lbs/gal.</u>
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](mailto: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





## Section 2. Hazards identification

### 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





## Section 3. Composition/information on ingredients

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





## Section 4. First aid measures

- 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<sub>2</sub>, 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.





## Section 6. Accidental release measures

- 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 protection

### Control parameters

#### Occupational exposure limits

##### **Ingredient name**

Gasoline, natural

Xylene

Toluene

n-Hexane

Benzene

1,2,4-Trimethylbenzene

Ethylbenzene

Naphthalene

##### **Exposure limits**

**OSHA PEL 1989 (United States, 3/1989).**

STEL: 1500 mg/m<sup>3</sup> 15 minute(s).

STEL: 500 ppm 15 minute(s).

TWA: 900 mg/m<sup>3</sup> 8 hour(s).

TWA: 300 ppm 8 hour(s).

**ACGIH TLV (United States, 1/2011).**

STEL: 651 mg/m<sup>3</sup> 15 minute(s).

STEL: 150 ppm 15 minute(s).

TWA: 434 mg/m<sup>3</sup> 8 hour(s).

TWA: 100 ppm 8 hour(s).

**OSHA PEL (United States, 6/2010).**

TWA: 100 ppm 8 hour(s).

TWA: 435 mg/m<sup>3</sup> 8 hour(s).

**NIOSH REL (United States, 6/2009).**

STEL: 560 mg/m<sup>3</sup> 15 minute(s).

STEL: 150 ppm 15 minute(s).

TWA: 375 mg/m<sup>3</sup> 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).

**ACGIH TLV (United States, 2/2010). Absorbed through skin.**

TWA: 50 ppm 8 hour(s).

**NIOSH REL (United States, 6/2009).**

TWA: 180 mg/m<sup>3</sup> 10 hour(s).

TWA: 50 ppm 10 hour(s).

**OSHA PEL (United States, 6/2010).**

TWA: 1800 mg/m<sup>3</sup> 8 hour(s).

TWA: 500 ppm 8 hour(s).

**ACGIH TLV (United States, 2/2010). Absorbed through skin.**

STEL: 8 mg/m<sup>3</sup> 15 minute(s).

STEL: 2.5 ppm 15 minute(s).

TWA: 1.6 mg/m<sup>3</sup> 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).

**ACGIH TLV (United States, 1/2011).**

TWA: 123 mg/m<sup>3</sup> 8 hour(s).

TWA: 25 ppm 8 hour(s).

**NIOSH REL (United States, 6/2009).**

TWA: 125 mg/m<sup>3</sup> 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/m<sup>3</sup> 8 hour(s).

**ACGIH TLV (United States, 1/2011).**

TWA: 20 ppm 8 hour(s).

**NIOSH REL (United States, 6/2009).**

STEL: 545 mg/m<sup>3</sup> 15 minute(s).

STEL: 125 ppm 15 minute(s).

TWA: 435 mg/m<sup>3</sup> 10 hour(s).

TWA: 100 ppm 10 hour(s).

**OSHA PEL (United States, 6/2010).**

TWA: 435 mg/m<sup>3</sup> 8 hour(s).

TWA: 100 ppm 8 hour(s).

**ACGIH TLV (United States, 1/2011).**



**Gasoline (all grades)**





## Section 8. Exposure controls/personal protection

STEL: 79 mg/m<sup>3</sup> 15 minute(s).  
 STEL: 15 ppm 15 minute(s).  
 TWA: 52 mg/m<sup>3</sup> 8 hour(s).  
 TWA: 10 ppm 8 hour(s).  
**NIOSH REL (United States, 6/2009).**  
 STEL: 75 mg/m<sup>3</sup> 15 minute(s).  
 STEL: 15 ppm 15 minute(s).  
 TWA: 50 mg/m<sup>3</sup> 10 hour(s).  
 TWA: 10 ppm 10 hour(s).  
**OSHA PEL (United States, 6/2010).**  
 TWA: 50 mg/m<sup>3</sup> 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 <sup>2</sup> /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.	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
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	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





## Section 11. Toxicological information

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 Category 3	Inhalation Not determined	central nervous system (CNS) Respiratory tract irritation
n-Hexane 1,2,4-Trimethylbenzene	Category 3 Category 3	Inhalation Not determined Not determined	Narcotic effects Narcotic effects Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
n-Hexane Benzene	Category 2 Category 1	Not determined Not determined	Not determined Not determined

### Aspiration hazard

Name	Result
Gasoline, natural Toluene n-Hexane Benzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 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**

### **Skin contact**

: Adverse symptoms may include the following:  
 irritation





**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)	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
Toluene	Acute LC50 3300 to 4093 ug/L Fresh water	Fish - Oncorhynchus mykiss - 0.6 g	96 hours
	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
n-Hexane	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
	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





Gasoline (all grades)

## Section 12. Ecological information

1,2,4-Trimethylbenzene	Acute LC50 5.28 u/L Fresh water Chronic NOEC 1.5 to 5.4 u/L Marine water	Fish - Oncorhynchus gorbusha - Fry Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 18.1 cm - 3.39 g	96 hours 4 weeks
Ethyl benzene	Acute LC50 4910 ug/L Marine water	Crustaceans - Elasmopus pectinicus - Adult	48 hours
	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
Naphthalene	Acute LC50 4200 ug/L Fresh water	Fish - Oncorhynchus mykiss	96 hours
	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 <sub>ow</sub>	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 (K<sub>oc</sub>) : 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.





Gasoline (all grades)

## 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  II  	3  II  	3  II  
Packing group			
Environmental hazards	Yes.	Yes.	Yes.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	<u>Limited quantity</u> Yes.  <u>Packaging instruction</u> <b>Passenger aircraft</b> Quantity limitation: 5 L  <b>Cargo aircraft</b> Quantity limitation: 60 L  <u>Special provisions</u> 139, B33, B1, T8	-	<u>Passenger and Cargo Aircraft</u> Quantity limitation: 5 L <u>Cargo Aircraft Only</u> Quantity limitation: 60 L <u>Limited Quantities - Passenger Aircraft</u> 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



**Gasoline (all grades)**

(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





## Section 15. Regulatory information

(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.



Gasoline (all grades)

## Section 15. Regulatory information

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.

Conforms to HazCom 2012/United States



# 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](mailto: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.





Diesel fuel (all grades)

## Section 2. Hazards identification

- 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.





## Section 4. First aid measures

- 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<sub>2</sub>, 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.





## Section 5. Fire-fighting measures

- 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 flames, 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 specialised 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.





Diesel fuel (all grades)

## Section 7. Handling and storage

**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
Fuel oil no. 2	ACGIH TLV (United States, 2/2010). Absorbed through skin. TWA: 100 mg/m <sup>3</sup> , (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.





## 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.
- 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<sup>2</sup>/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	Rabbit	-	0.5 minutes 100 mg	-
	Skin - Moderate irritant	Rabbit	-	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 Skin contact Ingestion



: No known  
significant  
effects or critical  
hazards.

: No known  
significant  
effects or critical  
hazards.

: No known  
significant  
effects or critical  
hazards.





## Section 11. Toxicological information

### 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
<b>UN number</b>	NA1993	NA1993	NA1993
<b>UN proper shipping name</b>	Fuel oil no. 2	Fuel oil no. 2	Fuel oil no. 2
<b>Transport hazard class(es)</b>	3 	3 	3 
<b>Packing group</b>	III	III	III
<b>Environmental hazards</b>	No.	No.	No.
<b>Special precautions for user</b>	Not available.	Not available.	Not available.
<b>Additional information</b>	-	-	-

**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.



## Section 15. Regulatory information

**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** : Kerosine, 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](mailto: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.





## Section 2. Hazards identification

- 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. Get medical attention if symptoms occur. 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.





Kerosene (all grades)

Never give anything by mouth to  
an unconscious person. If  
unconscious, place in recovery  
position and get medical  
attention immediately. Maintain  
an open airway.

## Section 2: Hazards identification





## Section 4. First aid measures

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 : 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<sub>2</sub>, 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 specialised 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. Do not swallow. Avoid contact with eyes, skin and clothing. 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



**Kerosene (all grades)**

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
Kerosene	NIOSH REL (United States, 6/2009). TWA: 100 mg/m <sup>3</sup> 10 hour(s). ACGIH TLV (United States, 2/2010). Absorbed through skin. TWA: 200 mg/m <sup>3</sup> , (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 <sup>2</sup> /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, chlorine, peroxides, nitric acid, sulfuric acid.
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	Rabbit	-	500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100%	-
	Skin - Moderate irritant	Rabbit	-	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





## Section 11. Toxicological information

### 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

## Section 11. Toxicological information



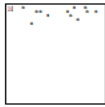




Kerosene (all grades)

## Section 13. Disposal considerations

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

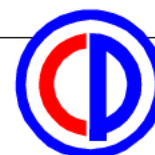




Conforms to HazCom 2012/United States

# SAFETY DATA SHEET

Transmix



## Section 1. Identification

**Product identifier used on the label** : Transmix

**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.

**Product type** : Liquid.

### Recommended use and restrictions

#### **Identified uses**

Mixtures of refined petroleum products in unknown concentrations

**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 2  
ACUTE TOXICITY: INHALATION - Category 4  
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.

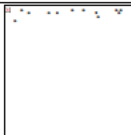
**Ingredients of unknown ecotoxicity** : Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 100%

### GHS label elements





## Section 2. Hazards identification



### Hazard pictograms

### Signal word

### Hazard statements

- : Danger
- : Highly flammable liquid and vapor.
- : Harmful if inhaled.
- : 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 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.





## Section 3. Composition/information on ingredients

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





## Section 4. First aid measures

- 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<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Highly 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.





## Section 5. Fire-fighting measures

- 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 flames, 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 specialised 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.





## Section 7. Handling and storage

**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
Gasoline	<b>ACGIH TLV (United States, 2/2010).</b> TWA: 300 ppm 8 hour(s). TWA: 890 mg/m <sup>3</sup> 8 hour(s). STEL: 500 ppm 15 minute(s). STEL: 1480 mg/m <sup>3</sup> 15 minute(s).
Fuel oil no. 2	<b>ACGIH TLV (United States, 2/2010). Absorbed through skin.</b> TWA: 100 mg/m <sup>3</sup> , (measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons
Kerosene	<b>NIOSH REL (United States, 6/2009).</b> TWA: 100 mg/m <sup>3</sup> 10 hour(s). <b>ACGIH TLV (United States, 2/2010). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hour(s).
Xylene	<b>ACGIH TLV (United States, 1/2011).</b> STEL: 651 mg/m <sup>3</sup> 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 434 mg/m <sup>3</sup> 8 hour(s). TWA: 100 ppm 8 hour(s). <b>OSHA PEL (United States, 6/2010).</b> TWA: 100 ppm 8 hour(s). TWA: 435 mg/m <sup>3</sup> 8 hour(s).
Toluene	<b>NIOSH REL (United States, 6/2009).</b> STEL: 560 mg/m <sup>3</sup> 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 375 mg/m <sup>3</sup> 10 hour(s). TWA: 100 ppm 10 hour(s). <b>OSHA PEL Z2 (United States, 11/2006).</b> AMP: 500 ppm 10 minute(s). CEIL: 300 ppm TWA: 200 ppm 8 hour(s). <b>ACGIH TLV (United States, 1/2011).</b> TWA: 20 ppm 8 hour(s).
n-Hexane	<b>ACGIH TLV (United States, 2/2010). Absorbed through skin.</b> TWA: 50 ppm 8 hour(s). <b>NIOSH REL (United States, 6/2009).</b> TWA: 180 mg/m <sup>3</sup> 10 hour(s). TWA: 50 ppm 10 hour(s). <b>OSHA PEL (United States, 6/2010).</b> TWA: 1800 mg/m <sup>3</sup> 8 hour(s). TWA: 500 ppm 8 hour(s).
Benzene	<b>ACGIH TLV (United States, 2/2010). Absorbed through skin.</b> STEL: 8 mg/m <sup>3</sup> 15 minute(s). STEL: 2.5 ppm 15 minute(s). TWA: 1.6 mg/m <sup>3</sup> 8 hour(s). TWA: 0.5 ppm 8 hour(s). <b>NIOSH REL (United States, 6/2009).</b> STEL: 1 ppm 15 minute(s). TWA: 0.1 ppm 10 hour(s). <b>OSHA PEL (United States, 6/2010).</b> STEL: 5 ppm 15 minute(s). TWA: 1 ppm 8 hour(s). <b>OSHA PEL Z2 (United States, 11/2006).</b> AMP: 50 ppm 10 minute(s).





## Section 8. Exposure controls/personal protection

1,2,4-Trimethylbenzene	CEIL: 25 ppm TWA: 10 ppm 8 hour(s).  <b>ACGIH TLV (United States, 1/2011).</b> TWA: 123 mg/m <sup>3</sup> 8 hour(s). TWA: 25 ppm 8 hour(s). <b>NIOSH REL (United States, 6/2009).</b> TWA: 125 mg/m <sup>3</sup> 10 hour(s). TWA: 25 ppm 10 hour(s). <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 25 ppm 8 hour(s). TWA: 125 mg/m <sup>3</sup> 8 hour(s).
Ethylbenzene	<b>ACGIH TLV (United States, 1/2011).</b> TWA: 20 ppm 8 hour(s). <b>NIOSH REL (United States, 6/2009).</b> STEL: 545 mg/m <sup>3</sup> 15 minute(s). STEL: 125 ppm 15 minute(s). TWA: 435 mg/m <sup>3</sup> 10 hour(s). TWA: 100 ppm 10 hour(s). <b>OSHA PEL (United States, 6/2010).</b> TWA: 435 mg/m <sup>3</sup> 8 hour(s). TWA: 100 ppm 8 hour(s).
Naphthalene	<b>ACGIH TLV (United States, 1/2011).</b> STEL: 79 mg/m <sup>3</sup> 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 52 mg/m <sup>3</sup> 8 hour(s). TWA: 10 ppm 8 hour(s). <b>NIOSH REL (United States, 6/2009).</b> STEL: 75 mg/m <sup>3</sup> 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 50 mg/m <sup>3</sup> 10 hour(s). TWA: 10 ppm 10 hour(s). <b>OSHA PEL (United States, 6/2010).</b> TWA: 50 mg/m <sup>3</sup> 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.





## Section 8. Exposure controls/personal protection

- 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 available.
- 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.

## Section 8 Exposure controls/personal protection





## Section 10. Stability and reactivity

**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
Xylene	LD50 Oral	Rat	3200 mg/kg	-
	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
Toluene	LD50 Oral	Rat	4300 mg/kg	-
	LC50 Inhalation Vapor	Rat	49 g/m3	4 hours
n-Hexane	LD50 Oral	Rat	636 mg/kg	-
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
Benzene	LD50 Oral	Rat	15840 mg/kg	-
1,2,4-Trimethylbenzene	LD50 Oral	Rat	930 mg/kg	-
	LC50 Inhalation Vapor	Rat	18000 mg/m3	4 hours
Ethylbenzene	LD50 Oral	Rat	5 g/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
Naphthalene	LD50 Oral	Rat	3500 mg/kg	-
	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	-
Kerosene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	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	-
	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	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-





## Section 11. Toxicological information

### 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 Category 3	Inhalation Not determined	central nervous system (CNS) Respiratory tract irritation
n-Hexane	Category 3	Inhalation	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	Not determined	Narcotic effects 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.





## Section 11. Toxicological information

- 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)	30303 ppm
Inhalation (vapors)	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
	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 pectinicus - Adult	48 hours
Ethy benzene	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 - 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 <sub>ow</sub>	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 (K<sub>oc</sub>) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.




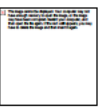






## Section 13. Disposal considerations

**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
<b>UN number</b>	UN1993	UN1993	UN1993
<b>UN proper shipping name</b>	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).
<b>Transport hazard class(es)</b>	3  	3  	3  
<b>Packing group</b>	II	II	II
<b>Environmental hazards</b>	Yes.	Yes.	Yes.
<b>Special precautions for user</b>	Not available.	Not available.	Not available.
<b>Additional information</b>	-	-	-

**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



## Section 15. Regulatory information

**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



## Section 15. Regulatory information

The following components are listed:  
 Kerosene;  
 Xylene;  
 Toluene;  
 n-Hexane;  
 Benzene;  
 Ethylbenzene;  
 1,2,4-Trimethylbenzene;  
 Napthalene



## Section 15. Regulatory information

- 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)
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****Section 15. Regulatory Information**

: ATE = Acute Toxicity Estimate  
B1F = 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 15. Regulatory information

# SAFETY DATA SHEET

Biodiesel (all grades)



Conforms to HazCom 2012/United States

**Section 15. Regulatory information****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](mailto: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**

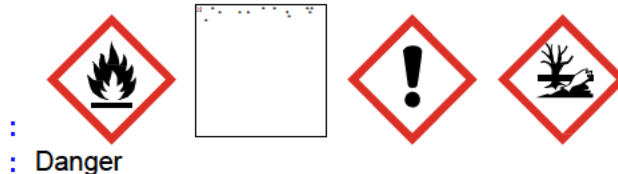
**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 3  
ACUTE TOXICITY: INHALATION - Category 4  
GERM CELL MUTAGENICITY - Category 1B  
CARCINOGENICITY - Category 1A  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
AQUATIC 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**







## Section 2. Hazards identification

<b>Hazard statements</b>	: 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.
<b>Precautionary statements</b>	
<b>General</b>	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
<b>Prevention</b>	: 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.
<b>Response</b>	: 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.
<b>Storage</b>	: Keep cool.
<b>Disposal</b>	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Other hazards which do not result in classification</b>	: Not available.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Bio-Fuel Oil #2, Bio-Fuel Oil, B100 Biodiesel

### CAS number/other identifiers

<b>CAS number</b>	: Not applicable.
<b>EC number</b>	: Mixture.
<b>Product code</b>	: 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

<b>Eye contact</b>	: 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.
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## Section 4. First aid measures

- 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<sub>2</sub>, 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 specialised 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 protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Benzene	ACGIH TLV (United States, 2/2010). Absorbed through skin. STEL: 8 mg/m <sup>3</sup> 15 minute(s). STEL: 2.5 ppm 15 minute(s). TWA: 1.6 mg/m <sup>3</sup> 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). CELL: 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.





## Section 8. Exposure controls/personal protection

**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.





## Section 9. Physical and chemical properties

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 <sup>2</sup> /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/m <sup>3</sup>	4 hours
Benzene	LD50 Oral	Rat	3200 mg/kg	-
	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





Biodiesel (all grades)

## Section 11. Toxicological information

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Distillates (petroleum), light catalytic cracked Benzene	- A1	2A 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 Benzene	Category 2 Category 1	Not determined Not determined	Not determined Not determined

### Aspiration hazard

Name	Result
Distillates (petroleum), full-range straight-run middle Benzene	ASPIRATION HAZARD - Category 1 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** : **Carcinogenicity** : **Mutagenicity** :



May cause damage to organs through prolonged or repeated exposure.

May cause cancer. Risk of cancer depends on duration and level of exposure. May cause genetic defects.





## Section 11. Toxicological information

**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 <sub>ow</sub>	BCF	Potential
Benzene	2.13	4.265795188	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : 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

atmosphere  
inside the

container. Do  
not cut, weld or  
grind used  
containers  
unless they have  
been cleaned  
thoroughly  
internally. Avoid

## Section 11. Toxicological information








Biodiesel (all grades)

## Section 13. Disposal considerations

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 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:** 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





## Section 15. Regulatory information

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

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Prepared by : KMK Regulatory Services Inc.



# Colonial Pipeline Company

## PRODUCT CHARACTERISTIC FACT SHEETS

### 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.



# 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.



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- 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



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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



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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 booms (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



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- 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 1, 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



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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 U.S.G.S. 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 U.S.G.S. 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.



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- 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) (7)(F), (b) (3)





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### 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



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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 eco-system. They may not contain endangered species, but are representative of the eco-system 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 US 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.



## Colonial Pipeline Company

### RELEASE RESPONSE STRATEGIES

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 eco-systems 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.



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## RELEASE RESPONSE STRATEGIES

### 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



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## RELEASE RESPONSE STRATEGIES

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.



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### 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.



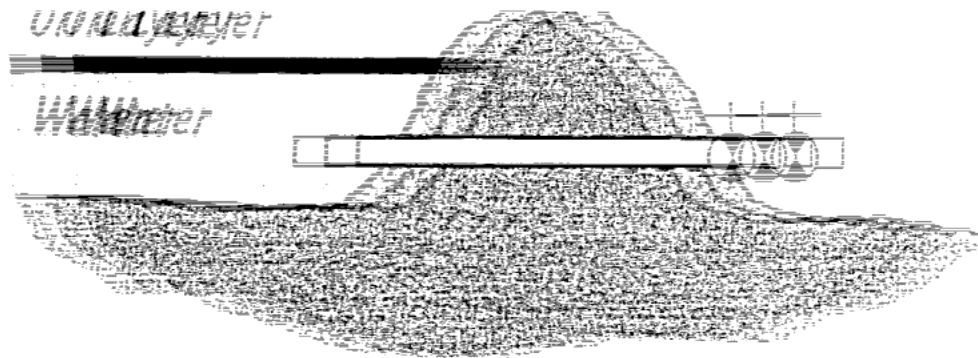
# Colonial Pipeline Company

## RELEASE RESPONSE STRATEGIES

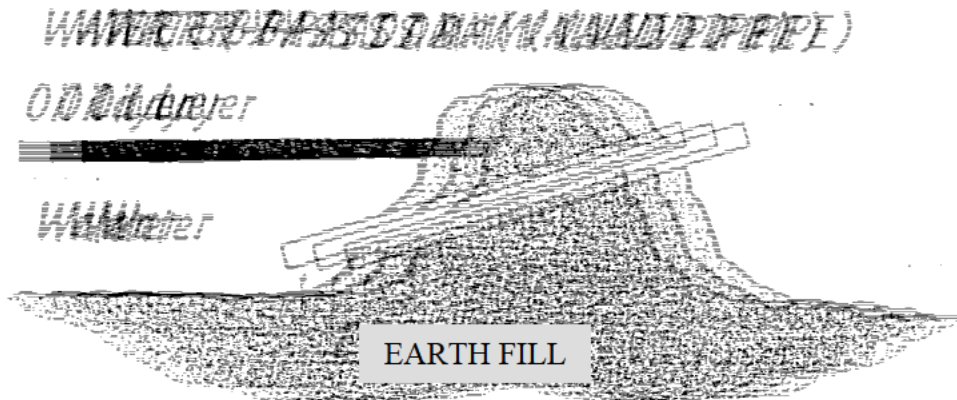
### Underflow Dams

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 30 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 FLOW OF STREAM IS BY-PASSED TO MAINTAIN RESERVOIR LEVEL. ELEVATE DISCHARGE END OF TUBE(S) TO DESIRED RESERVOIR LEVEL.

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FLOW - CUBIC FEET PER SECOND  
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 MINIMUM PIPE SIZE

0 FT/SEC.  
 5 FT/SEC.  
 10 FT/SEC.  
 15 FT/SEC.  
 20 FT/SEC.  
 25 FT/SEC.  
 30 FT/SEC.  
 35 FT/SEC.  
 40 FT/SEC.  
 45 FT/SEC.  
 50 FT/SEC.  
 55 FT/SEC.  
 60 FT/SEC.  
 65 FT/SEC.  
 70 FT/SEC.  
 75 FT/SEC.  
 80 FT/SEC.  
 85 FT/SEC.  
 90 FT/SEC.  
 95 FT/SEC.  
 100 FT/SEC.

0 0 0 5 5 5 10 10 10 15 15 15 20 20 20

CROSS SECTION OF DRAINAGE AREA

PIPE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	4 1/2"	5"	5 1/2"	6"	6 1/2"	7"	7 1/2"	8"	8 1/2"	9"	9 1/2"	10"	10 1/2"	11"	11 1/2"	12"	12 1/2"	13"	13 1/2"	14"	14 1/2"	15"	15 1/2"	16"	16 1/2"	17"	17 1/2"	18"	18 1/2"	19"	19 1/2"	20"	20 1/2"	21"	21 1/2"	22"	22 1/2"	23"	23 1/2"	24"	24 1/2"	25"	25 1/2"	26"	26 1/2"	27"	27 1/2"	28"	28 1/2"	29"	29 1/2"	30"	30 1/2"	31"	31 1/2"	32"	32 1/2"	33"	33 1/2"	34"	34 1/2"	35"	35 1/2"	36"	36 1/2"	37"	37 1/2"	38"	38 1/2"	39"	39 1/2"	40"	40 1/2"	41"	41 1/2"	42"	42 1/2"	43"	43 1/2"	44"	44 1/2"	45"	45 1/2"	46"	46 1/2"	47"	47 1/2"	48"	48 1/2"	49"	49 1/2"	50"	50 1/2"	51"	51 1/2"	52"	52 1/2"	53"	53 1/2"	54"	54 1/2"	55"	55 1/2"	56"	56 1/2"	57"	57 1/2"	58"	58 1/2"	59"	59 1/2"	60"	60 1/2"	61"	61 1/2"	62"	62 1/2"	63"	63 1/2"	64"	64 1/2"	65"	65 1/2"	66"	66 1/2"	67"	67 1/2"	68"	68 1/2"	69"	69 1/2"	70"	70 1/2"	71"	71 1/2"	72"	72 1/2"	73"	73 1/2"	74"	74 1/2"	75"	75 1/2"	76"	76 1/2"	77"	77 1/2"	78"	78 1/2"	79"	79 1/2"	80"	80 1/2"	81"	81 1/2"	82"	82 1/2"	83"	83 1/2"	84"	84 1/2"	85"	85 1/2"	86"	86 1/2"	87"	87 1/2"	88"	88 1/2"	89"	89 1/2"	90"	90 1/2"	91"	91 1/2"	92"	92 1/2"	93"	93 1/2"	94"	94 1/2"	95"	95 1/2"	96"	96 1/2"	97"	97 1/2"	98"	98 1/2"	99"	99 1/2"	100"	100 1/2"	101"	101 1/2"	102"	102 1/2"	103"	103 1/2"	104"	104 1/2"	105"	105 1/2"	106"	106 1/2"	107"	107 1/2"	108"	108 1/2"	109"	109 1/2"	110"	110 1/2"	111"	111 1/2"	112"	112 1/2"	113"	113 1/2"	114"	114 1/2"	115"	115 1/2"	116"	116 1/2"	117"	117 1/2"	118"	118 1/2"	119"	119 1/2"	120"	120 1/2"	121"	121 1/2"	122"	122 1/2"	123"	123 1/2"	124"	124 1/2"	125"	125 1/2"	126"	126 1/2"	127"	127 1/2"	128"	128 1/2"	129"	129 1/2"	130"	130 1/2"	131"	131 1/2"	132"	132 1/2"	133"	133 1/2"	134"	134 1/2"	135"	135 1/2"	136"	136 1/2"	137"	137 1/2"	138"	138 1/2"	139"	139 1/2"	140"	140 1/2"	141"	141 1/2"	142"	142 1/2"	143"	143 1/2"	144"	144 1/2"	145"	145 1/2"	146"	146 1/2"	147"	147 1/2"	148"	148 1/2"	149"	149 1/2"	150"	150 1/2"	151"	151 1/2"	152"	152 1/2"	153"	153 1/2"	154"	154 1/2"	155"	155 1/2"	156"	156 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## RELEASE RESPONSE STRATEGIES

### **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**

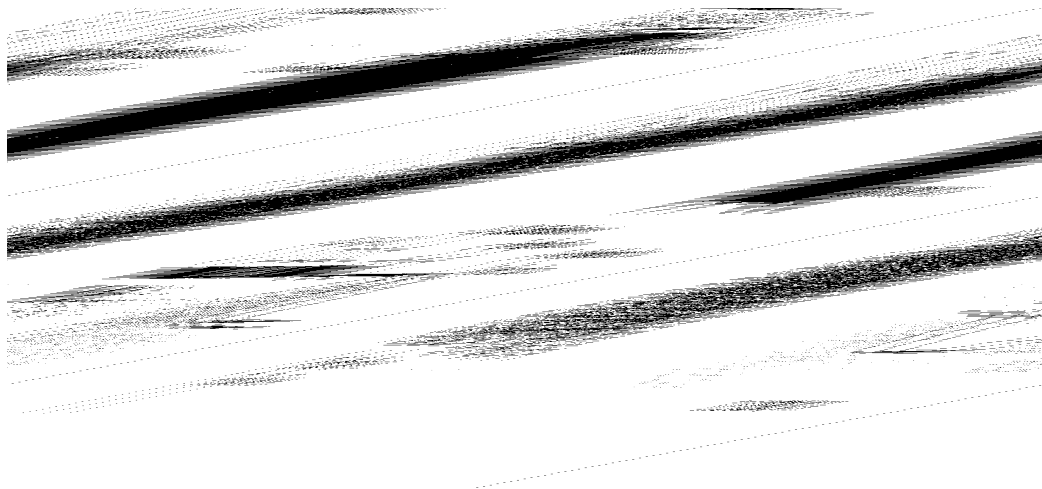
Diversion berms may be constructed from floodplain materials on large rivers. In most situations they should be constructed in a series, connected with short pieces of boom in a pattern that forces product to flow into a containment pit, side channel or similar features for temporary storage. The spacing 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.





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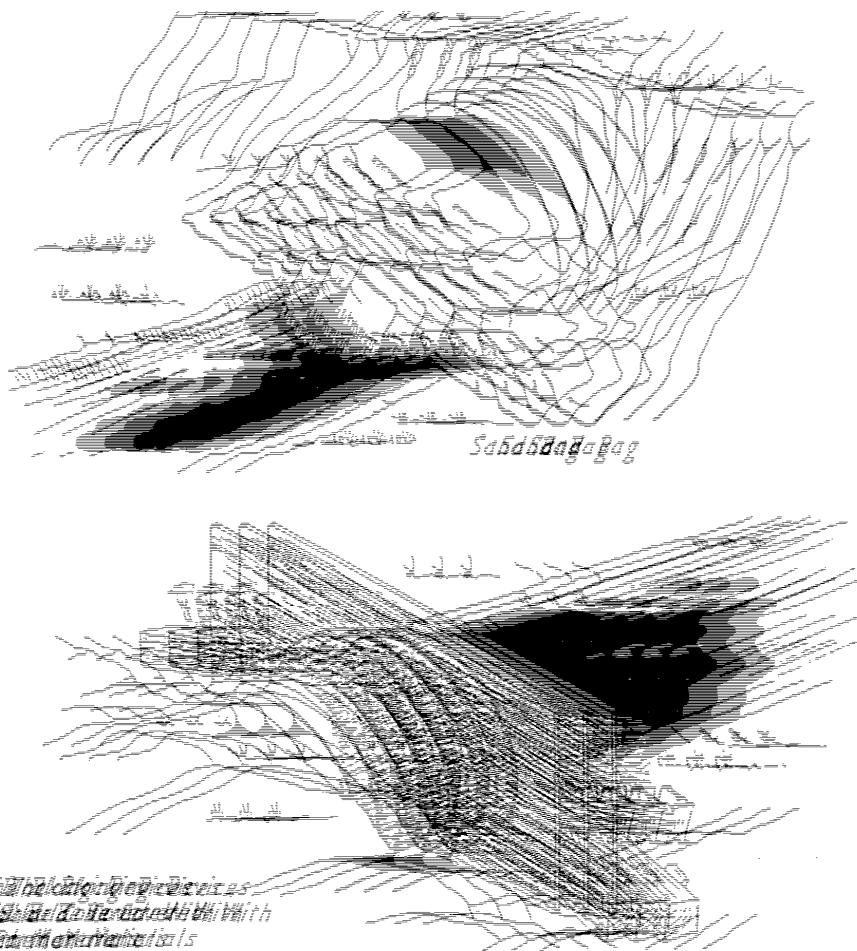
## RELEASE RESPONSE STRATEGIES

### 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.





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## RELEASE RESPONSE STRATEGIES

### 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

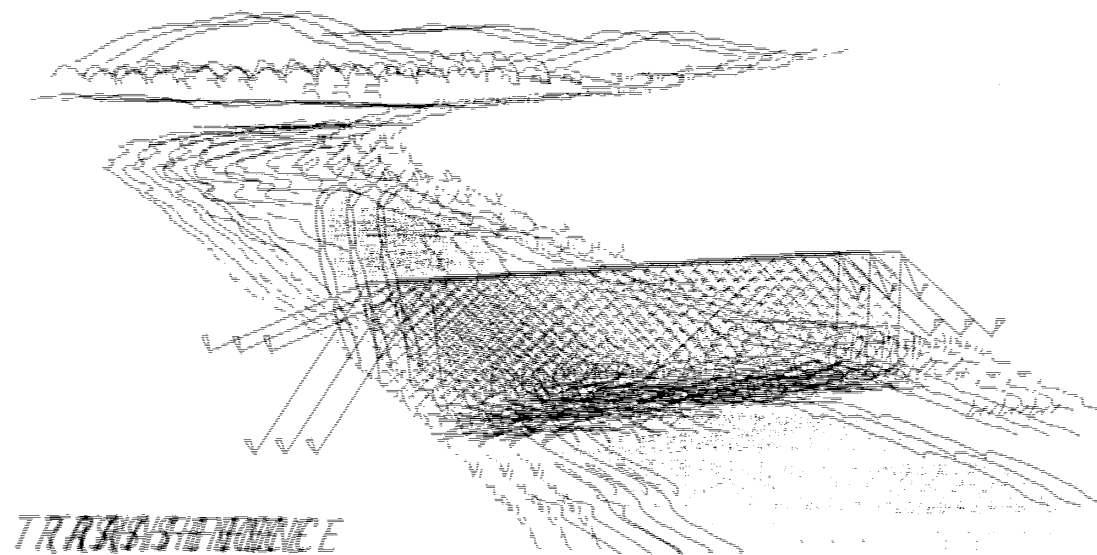
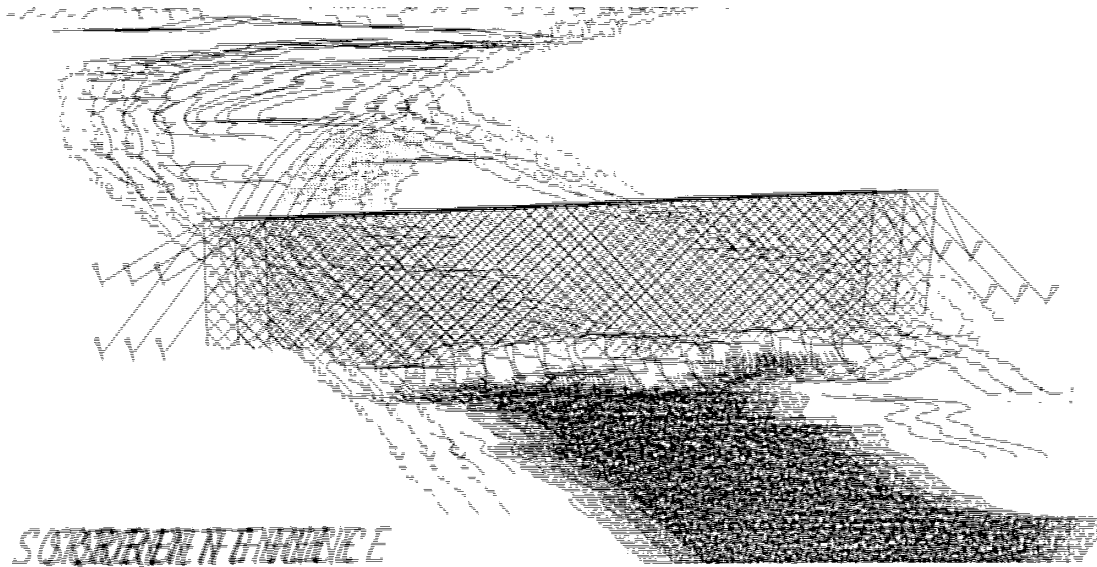
Sorbent and trash fences may be used wherever stream depth or configuration render dams, berms or booms impractical. Fences can be constructed quickly with stakes, and wire mesh. Sorbent booms, pads, sheets, chips, straw and small bushes may be used effectively. The mesh will hold the sorbent material 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.



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## RELEASE RESPONSE STRATEGIES

Note:



Sorbents are an important part of the overall containment plan and should be used whenever mechanical devices are not practical. However sorbents should never be used when there is not a reasonable way to recover them.



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## RELEASE RESPONSE STRATEGIES

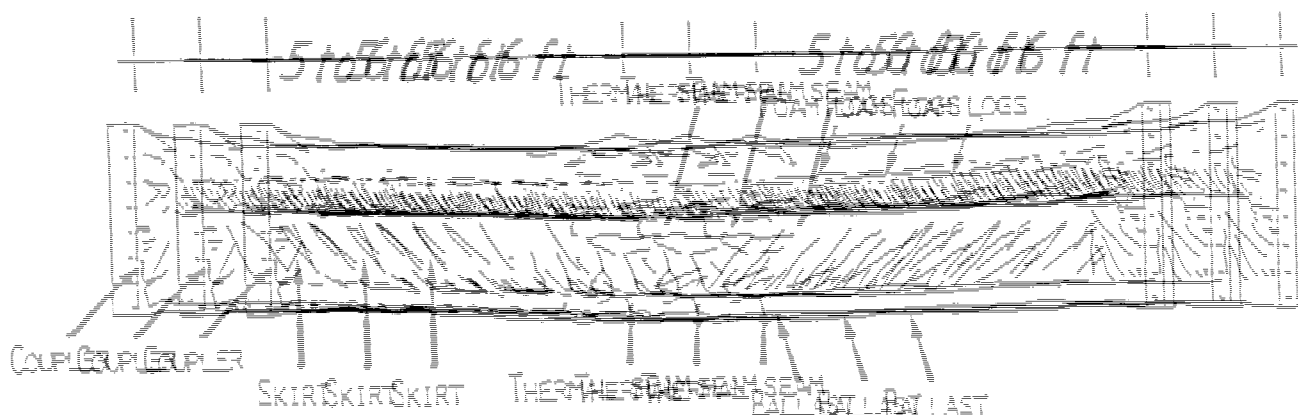
### **Booming**

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 30 degrees<sup>□</sup>. 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.



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## RELEASE RESPONSE STRATEGIES

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.

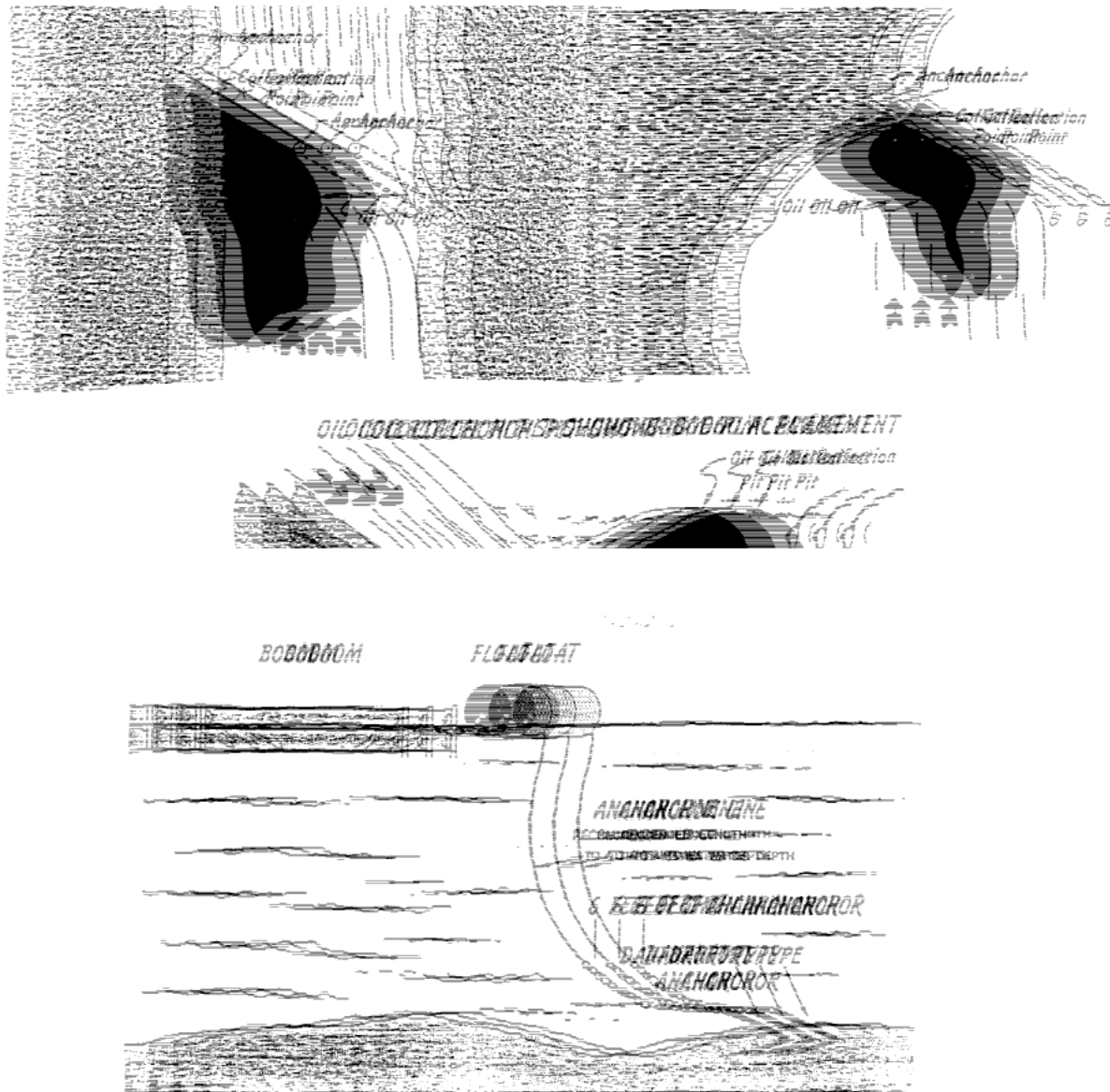
### **Deflection Booming**

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 down stream 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.



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## RELEASE RESPONSE STRATEGIES



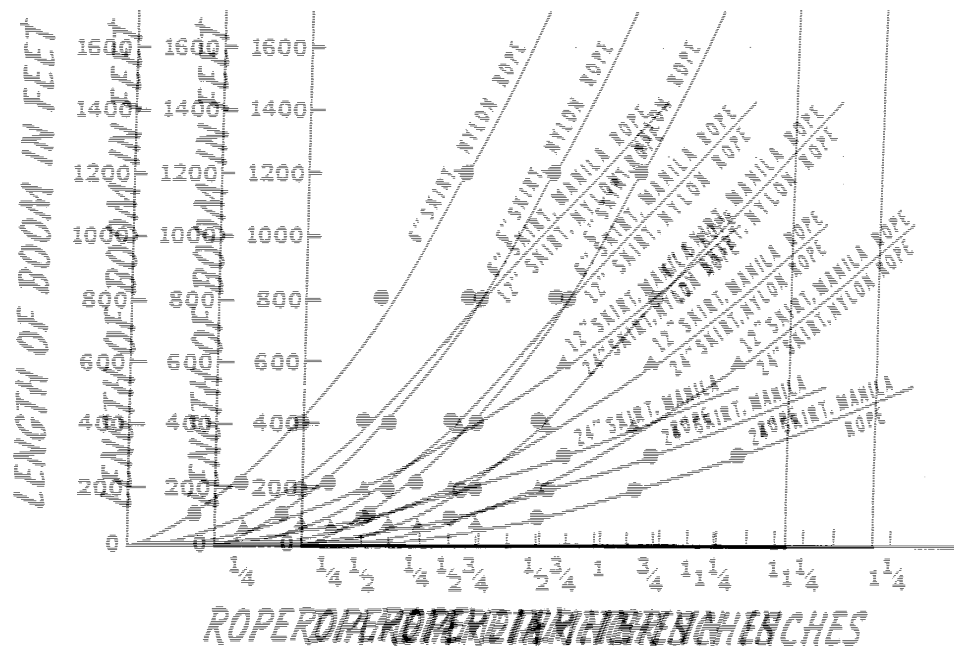
In some instances it may not be possible or desirable to boom from shore to shore. The diagram above illustrates the proper technique for anchoring boom in mid stream. This method may be used for one or both ends of the boom.



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### RELEASE RESPONSE STRATEGIES

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.

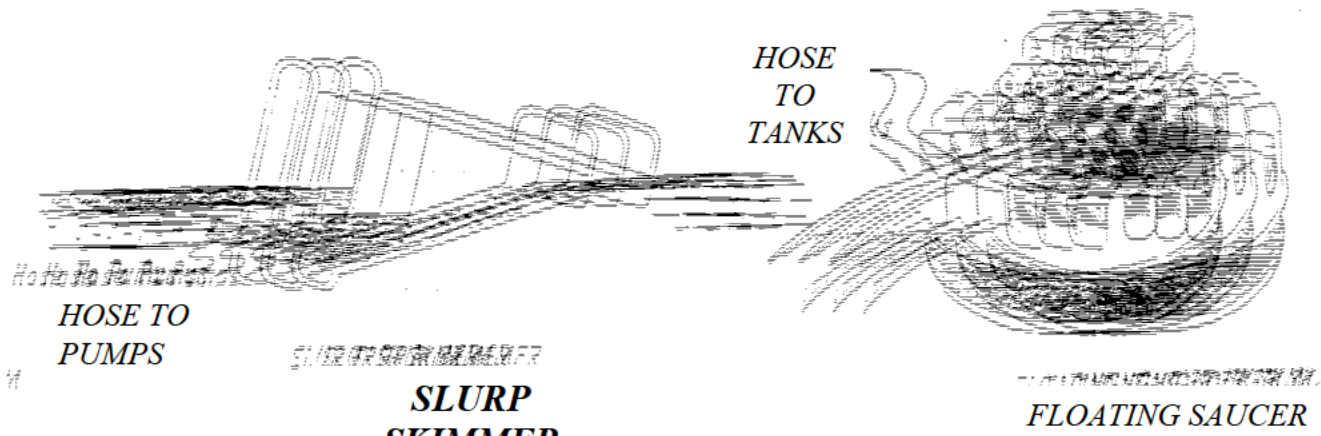
Skimmers with the above specifications can be used along the shore lines of streams or banks in conjunction with diversion boom. The skimmers can also be used aboard a workboat inside of containment boom. In all cases, on-shore storage for collected product will have to be provided.



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## RELEASE RESPONSE STRATEGIES

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.

### Heavy Equipment

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.



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## RELEASE RESPONSE STRATEGIES

### **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 pre-set 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



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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 difficulty with recovery and disposal operations.



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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 or Fish and Game Commission. If a portable oil/water separator is available, treated water may be re-circulated.



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### **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 35 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.



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### ***Suggested Actions:***

- High-priority areas require the use of release protection devices 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



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### **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 re-colonization of fauna/flora, and minimize aesthetic damage and chronic leaching of oil from structure.



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### Clean Up Technologies

The following table presents a number of alternatives for cleaning up oil in the environment, primarily along shorelines.

<b>ACTION</b>	<b>DESCRIPTION</b>	<b>WHEN TO USE</b>	<b>BIOLOGICAL CONSTRAINTS</b>	<b>ENVIRONMENTAL EFFECTS</b>
<b>No Action</b>	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.
<b>Manual Removal</b>	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.
<b>Passive Collection Sorbents</b>	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.
<b>Debris Removal</b>	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.
<b>Trenching</b>	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.
<b>Sediment Removal</b>	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.
<b>Cold Water Flooding</b>	Wash oil from surfaces and crevices to water's edge for collection.	Boulder, cobble, gravel, 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.
<b>Cold Water/Low Pressure</b>	Remove oil that has adhered to rocks or man-made structures.	Boulder, cobble and rock/seawall shorelines heavily oiled. Not appropriate for sedimentary habitats. Best	Not appropriate for sand, gravel, mud beaches, marshes or shorelines where destruction of	May flush contamination into other areas. Increases turbidity in



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<b>Washing</b>	Oil floated to shoreline for pickup by a skimmer.	where adhered oil must be removed to prevent continuous release into environment.	biological communities must be avoided.	water.
<b>ACTION</b>	<b>DESCRIPTION</b>	<b>WHEN TO USE</b>	<b>BIOLOGICAL CONSTRAINTS</b>	<b>ENVIRONMENTAL EFFECTS</b>
<b>Cold Water/High Pressure Washing</b>	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.
<b>Warm Water/Mode rate to High Pressure Washing</b>	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.
<b>Hot Water Pressure Washing</b>	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.
<b>Slurry Sand Blasting</b>	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.
<b>Vacuum</b>	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.
<b>Shoreline Removal, Cleansing and Replacement</b>	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.
<b>Cutting Vegetation</b>	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.



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## RELEASE RESPONSE STRATEGIES

### 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 be 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.



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### **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.



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### **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 .



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## RELEASE RESPONSE STRATEGIES

### **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



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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 E-mail system can be used to send messages to the Incident Commander and/or the Situation Room in Atlanta. Colonials' e-mail system includes mailboxes for "Incident Commander" (email address [incident@colpipe.com](mailto:incident@colpipe.com)) and "Atlanta Support Team" (email address [response@colpipe.com](mailto: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
H <sub>2</sub> S	<1ppm	ACGIH TLV-TWA for H <sub>2</sub> S
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 workday and a 40-hour workweek, 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.

Sampling strategy:

- **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, re-sample at least every 100 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



## Colonial Pipeline Company Air Monitoring Protocols During Emergency Response

- 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 15 minutes
- Evacuate occupied buildings within or near the perimeter
- If detection readings sustain (or drop) during any 1 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 <sup>1</sup>	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

<sup>1</sup>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



## Colonial Pipeline Company Air Monitoring Protocols During Emergency Response

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 re-occupation criteria are listed in table below. Re-occupation action levels are the inverse of evacuation levels. Re-occupation 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



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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, & 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 <sup>1</sup>	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument <sup>2</sup>	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

<sup>1</sup>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 & naphthalene.

<sup>2</sup> 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



## Colonial Pipeline Company Air Monitoring Protocols During Emergency Response

sensor has correction factors for jet fuel, xylene, toluene, n-hexane, benzene, ethylbenzene, & 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 <sup>‡</sup>	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 workday and a 40-hour workweek, 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 <sup>1</sup>	Respirator
<b>Gasoline</b>			
General Air Monitoring	D	< 300 ppm	None
Air Monitoring w/ vapor exposure	B	≥ 300 ppm	SCBA or airline respirator w/ 10 min escape
<b>Benzene</b>			
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
<b>Toluene</b>			
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
<b>Ethyl benzene</b>			
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
<b>Xylene</b>			
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



## Colonial Pipeline Company Air Monitoring Protocols During Emergency Response

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, & VOCs (volatile organic compounds)

### Recommended Real-Time Data Collection:

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument <sup>1</sup>	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument <sup>2</sup>	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm

<sup>1</sup> 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.

<sup>2</sup> 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 <sup>3</sup>		12 ppm VOCs



## Colonial Pipeline Company Air Monitoring Protocols During Emergency Response

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-STEEL = 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 workweek, 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-STEEL = 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 <sup>1</sup>	Action
<b>Diesel</b>			
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
<b>Benzene</b>			
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.



## Colonial Pipeline Company Air Monitoring Protocols During Emergency Response

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, & VOCs (volatile organic compounds)

### Recommended Real-Time Data Collection:

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument <sup>1</sup>	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument <sup>2</sup>	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

<sup>1</sup> 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, & naphthalene.

<sup>2</sup> 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, & 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



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### 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 workday and a 40-hour workweek, 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 <sup>1</sup>	Action
<b>Kerosene</b>			
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
<b>Benzene</b>			
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



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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, & 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 <sup>1</sup>	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument <sup>2</sup>	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

<sup>1</sup> 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 & naphthalene.

<sup>2</sup> 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, & 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



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Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours
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### 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 <sup>†</sup>	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 workweek, 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 <sup>†</sup>	Action
<b>Naphtha</b>			
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
<b>Benzene</b>			
General Air Monitoring	D	< 0.5 ppm	None



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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
<b>Toluene</b>			
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
<b>Ethyl benzene</b>			
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
<b>Xylene</b>			
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.



# Colonial Pipeline Company

## AIR MONITORING PROTOCOL

### Biodiesel (all grades)

Hazards of concern: (listed in SDS for product)

Petroleum distillates & benzene

Other hazards not listed specifically in SDS:

LEL (lower explosive limit), naphtha, & VOCs (volatile organic compounds)

### Recommended Real-Time Data Collection:

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument <sup>1</sup>	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument <sup>2</sup>	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

<sup>1</sup> 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.

<sup>2</sup> 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).

OSHA PEL-STEL = The time-weighted average exposure that should not be exceeded for any 15-minute period (OSHA 29 CFR: 1910.1000).



# Colonial Pipeline Company

## AIR MONITORING PROTOCOL

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 workweek, 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 <sup>1</sup>	Action
<b>Naphtha</b>			
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 – 1000 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
<b>Benzene</b>			
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

<sup>1</sup>= 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

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# Colonial Pipeline Company

## BLOCK VALVE LOCATIONS

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# Colonial Pipeline Company

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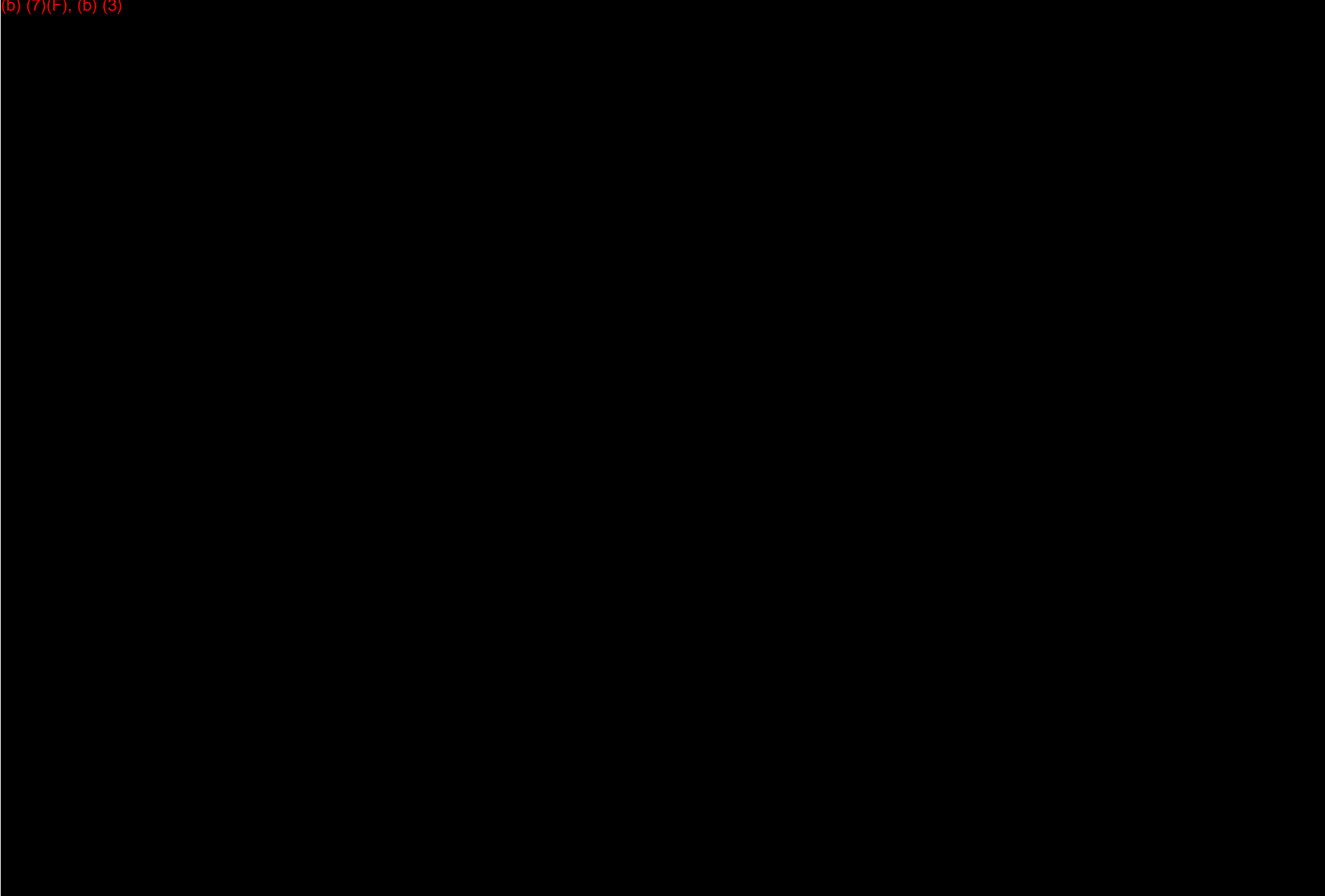




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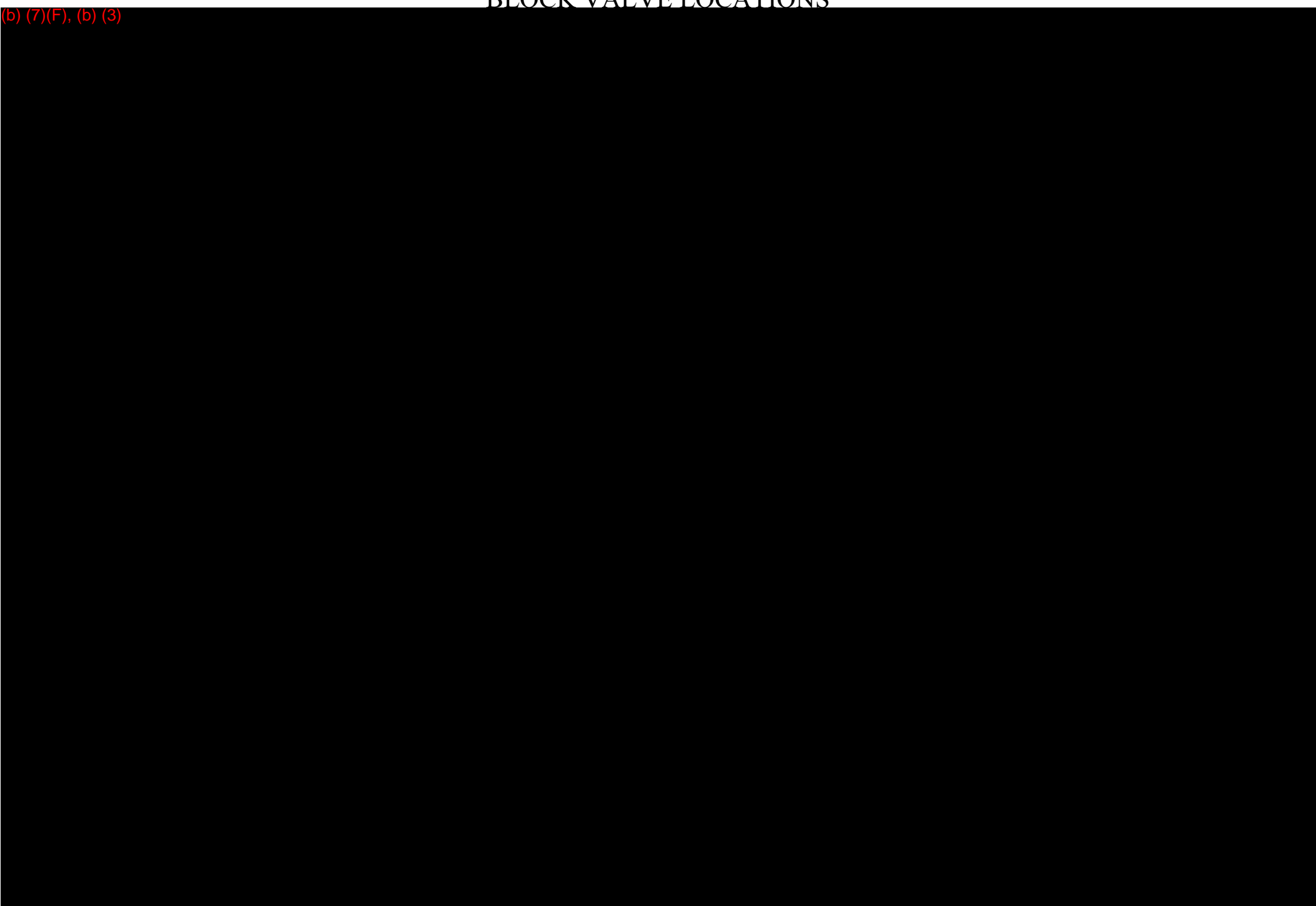




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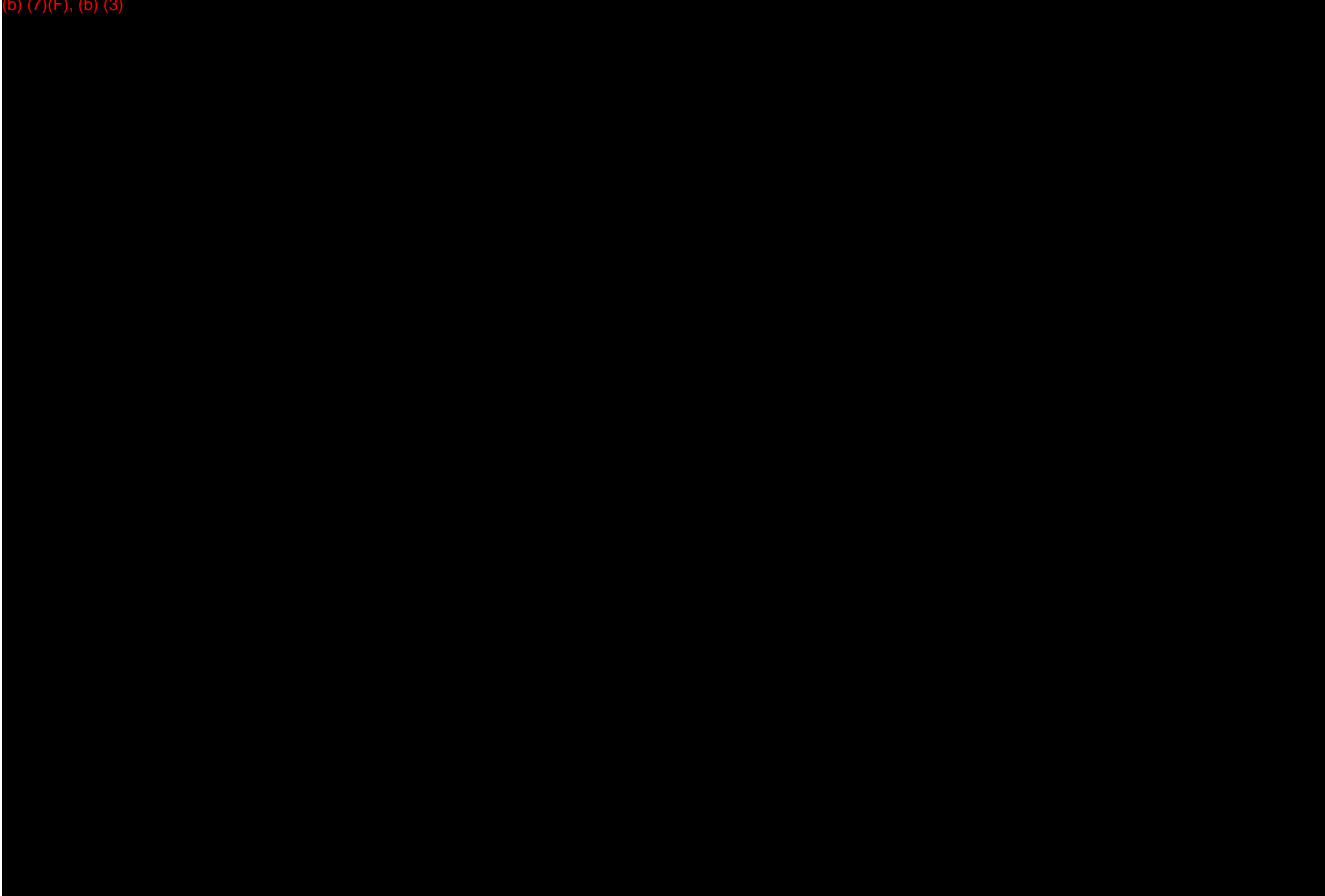




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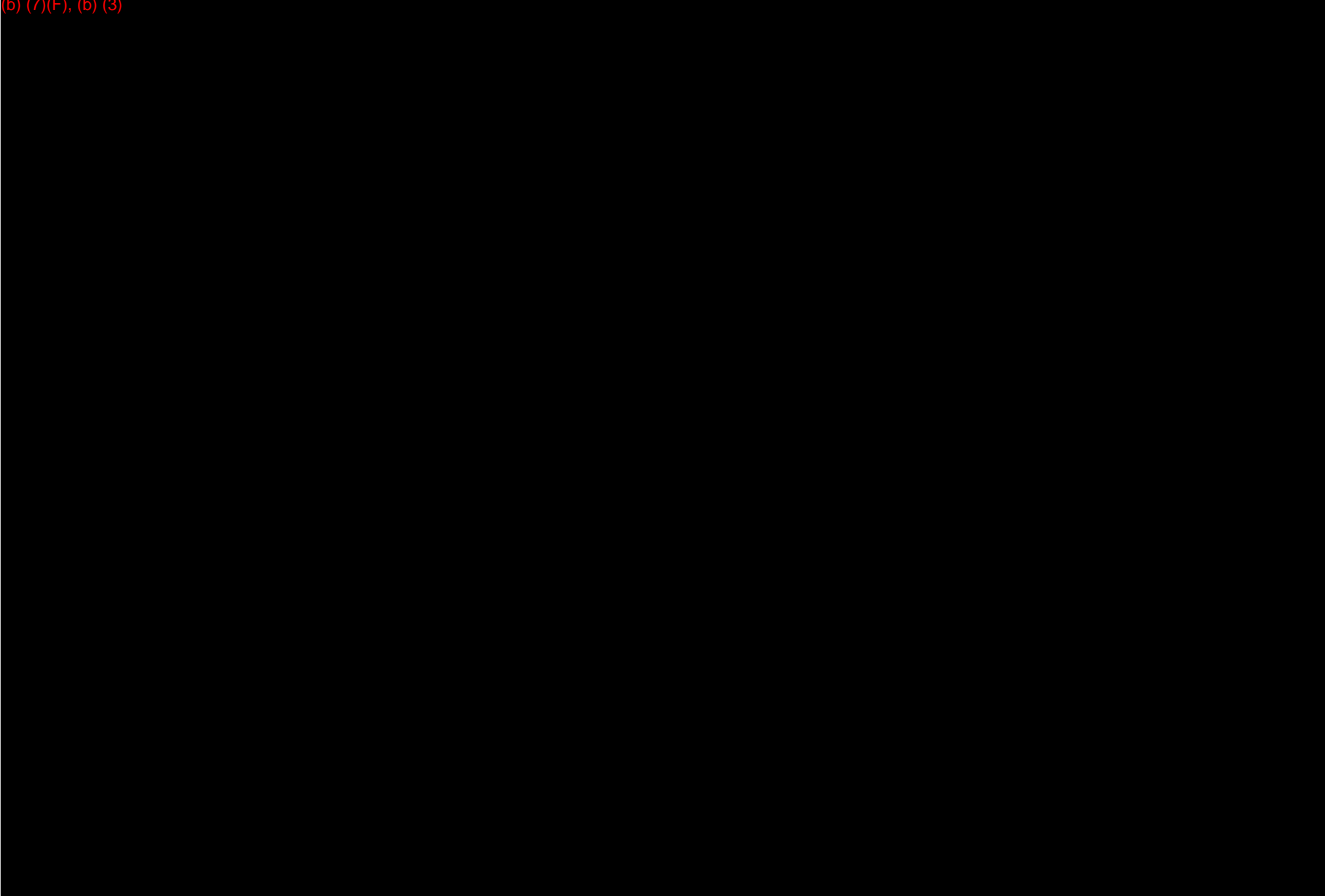




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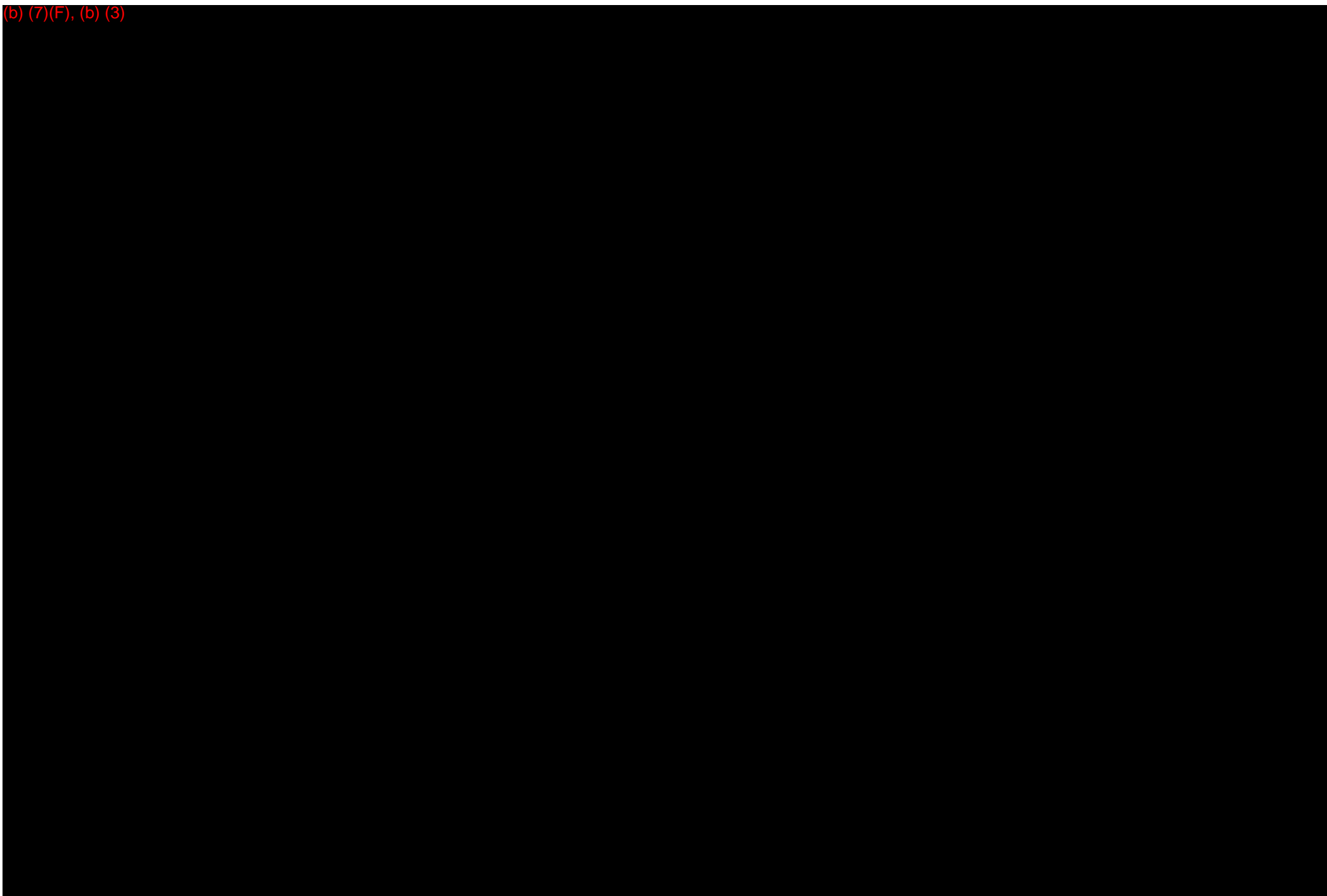
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# Colonial Pipeline Company

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# Colonial Pipeline Company

## RECTIFIER LOCATIONS

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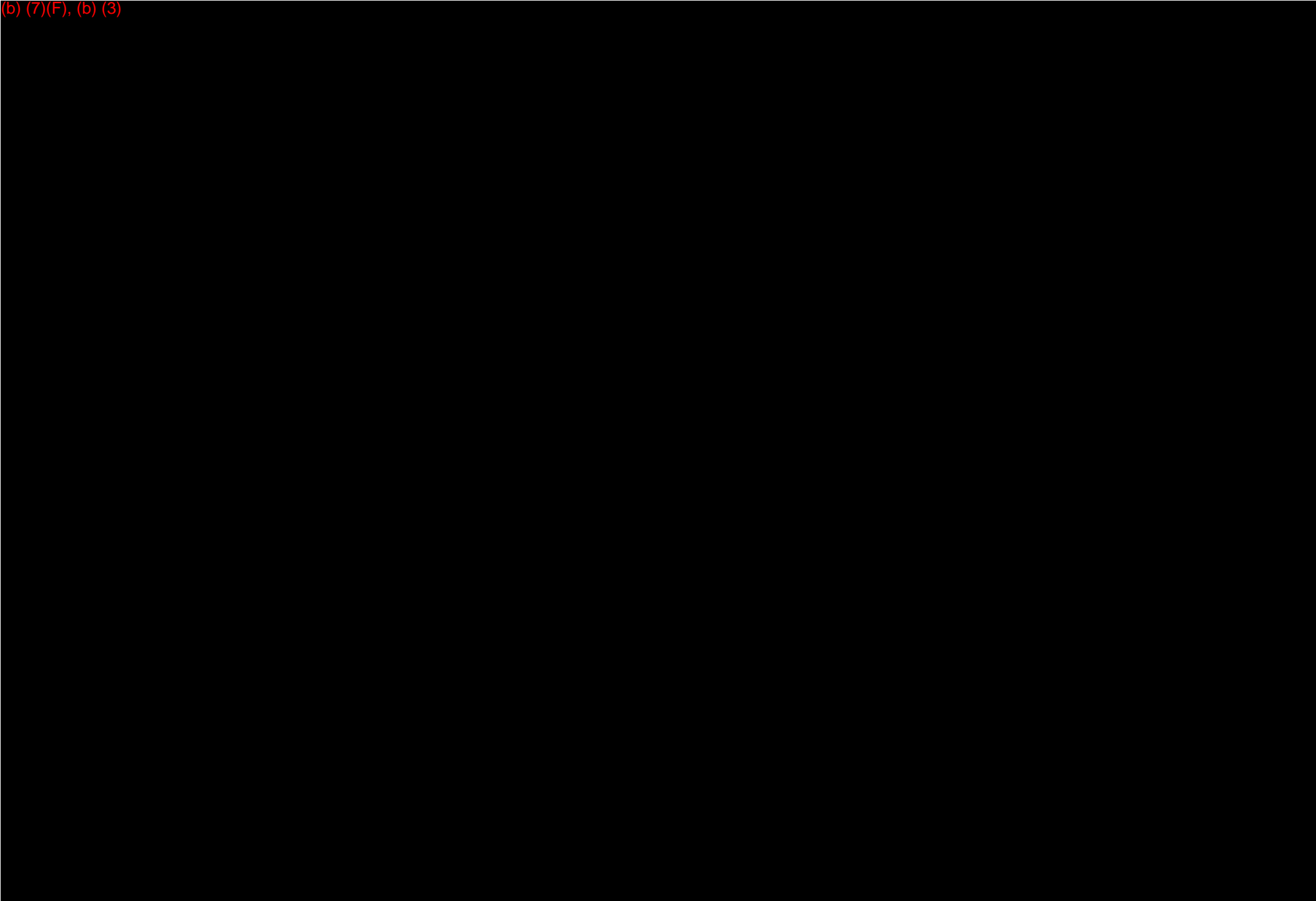
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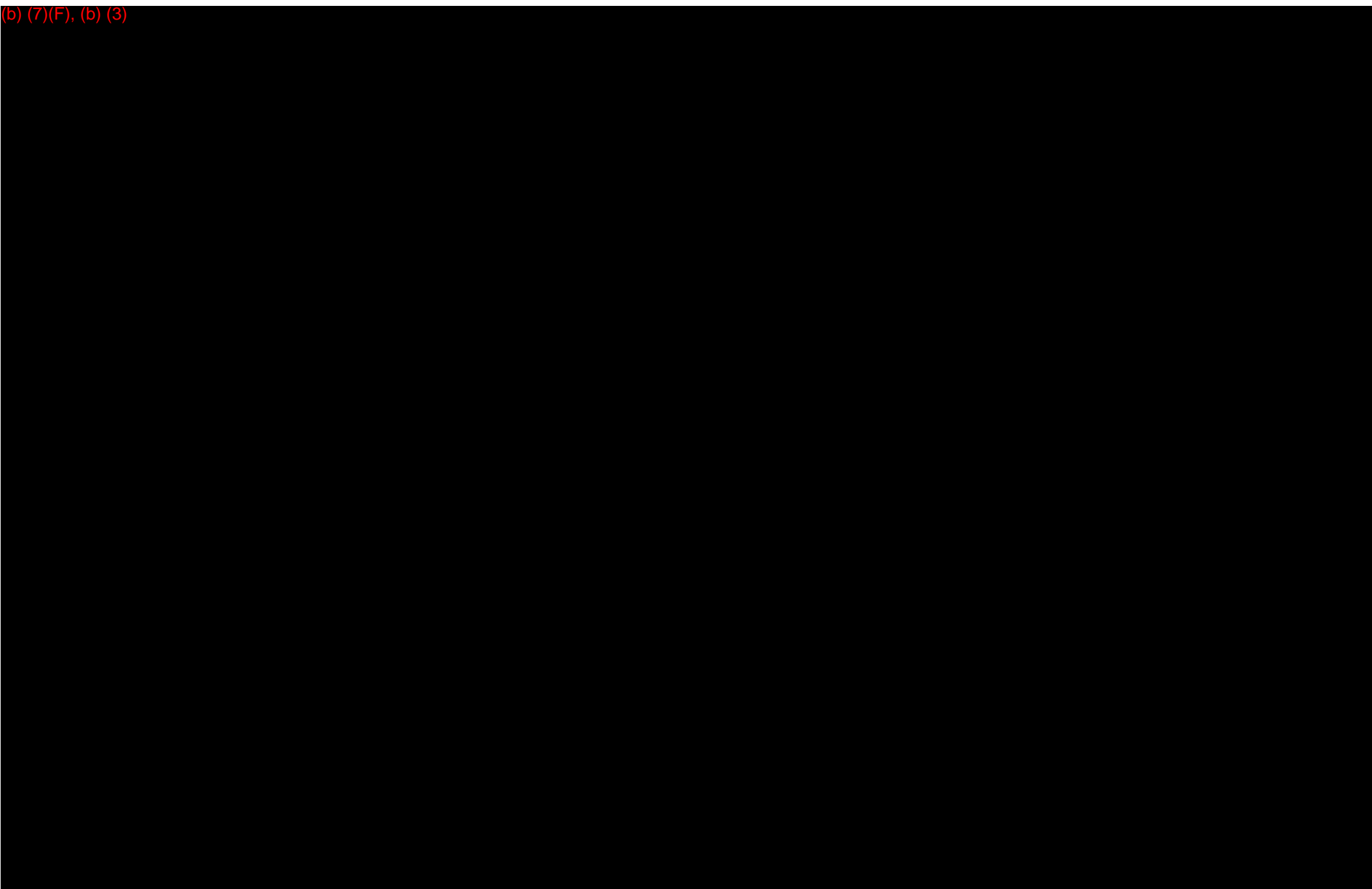
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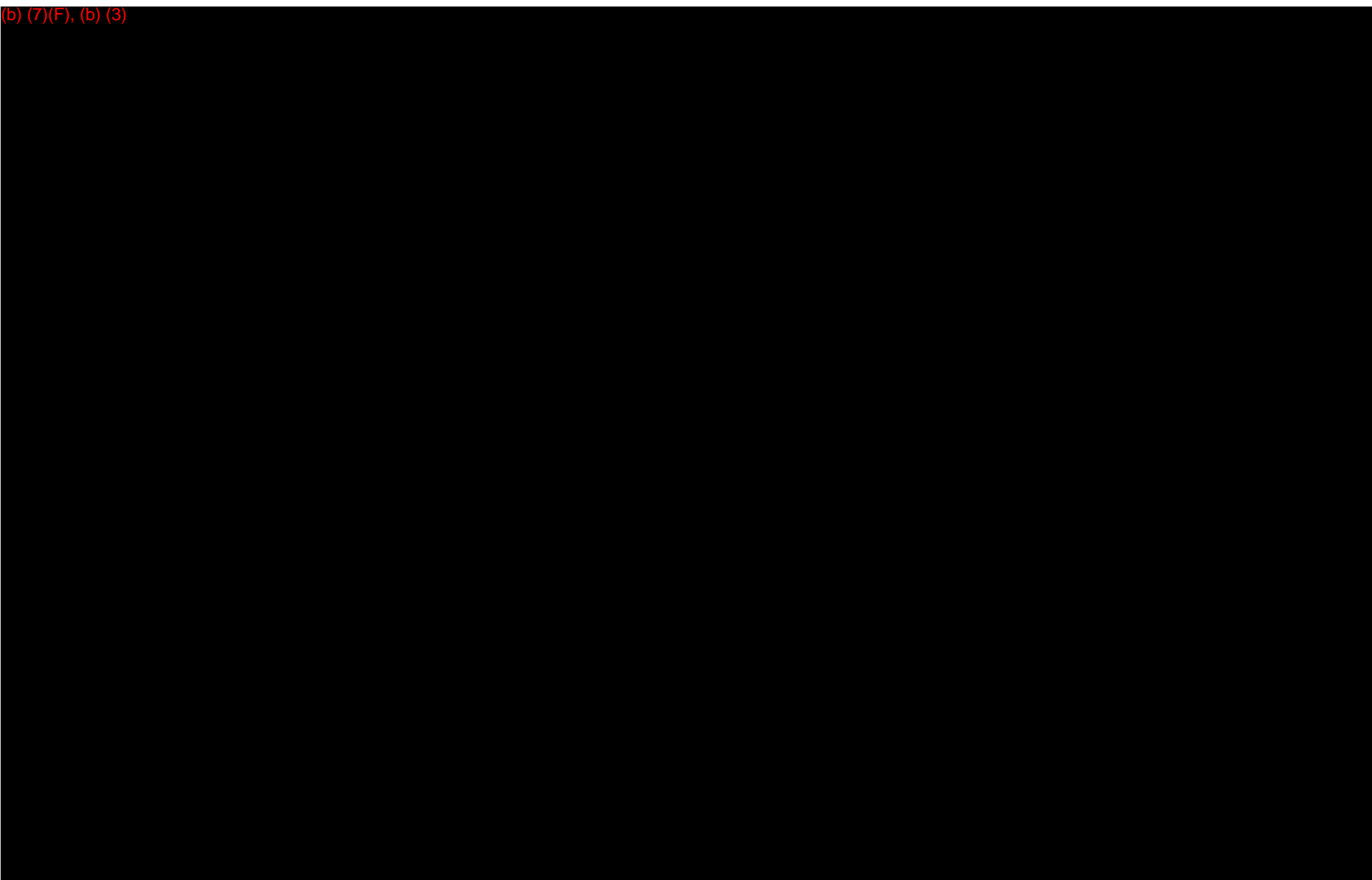




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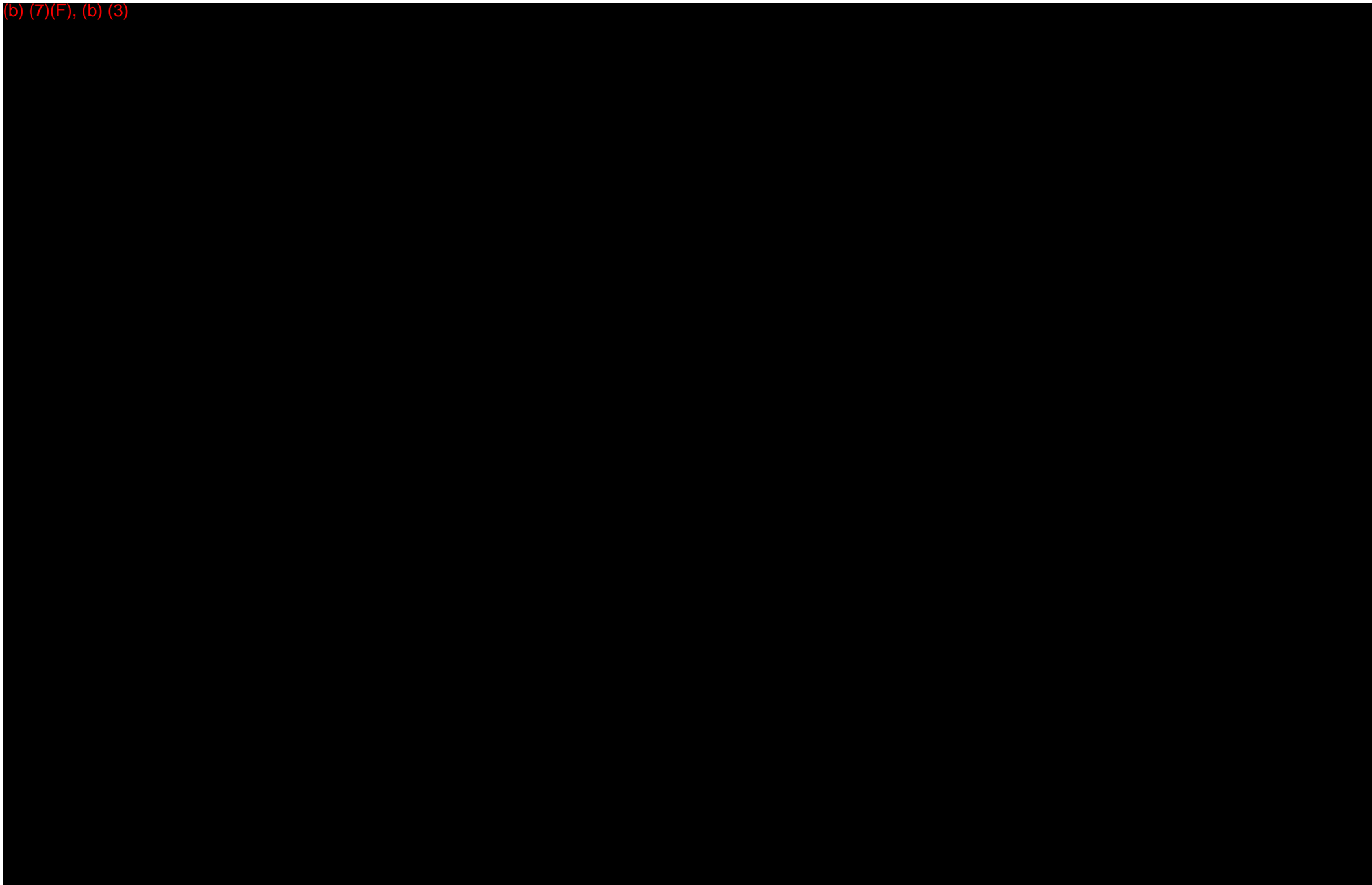




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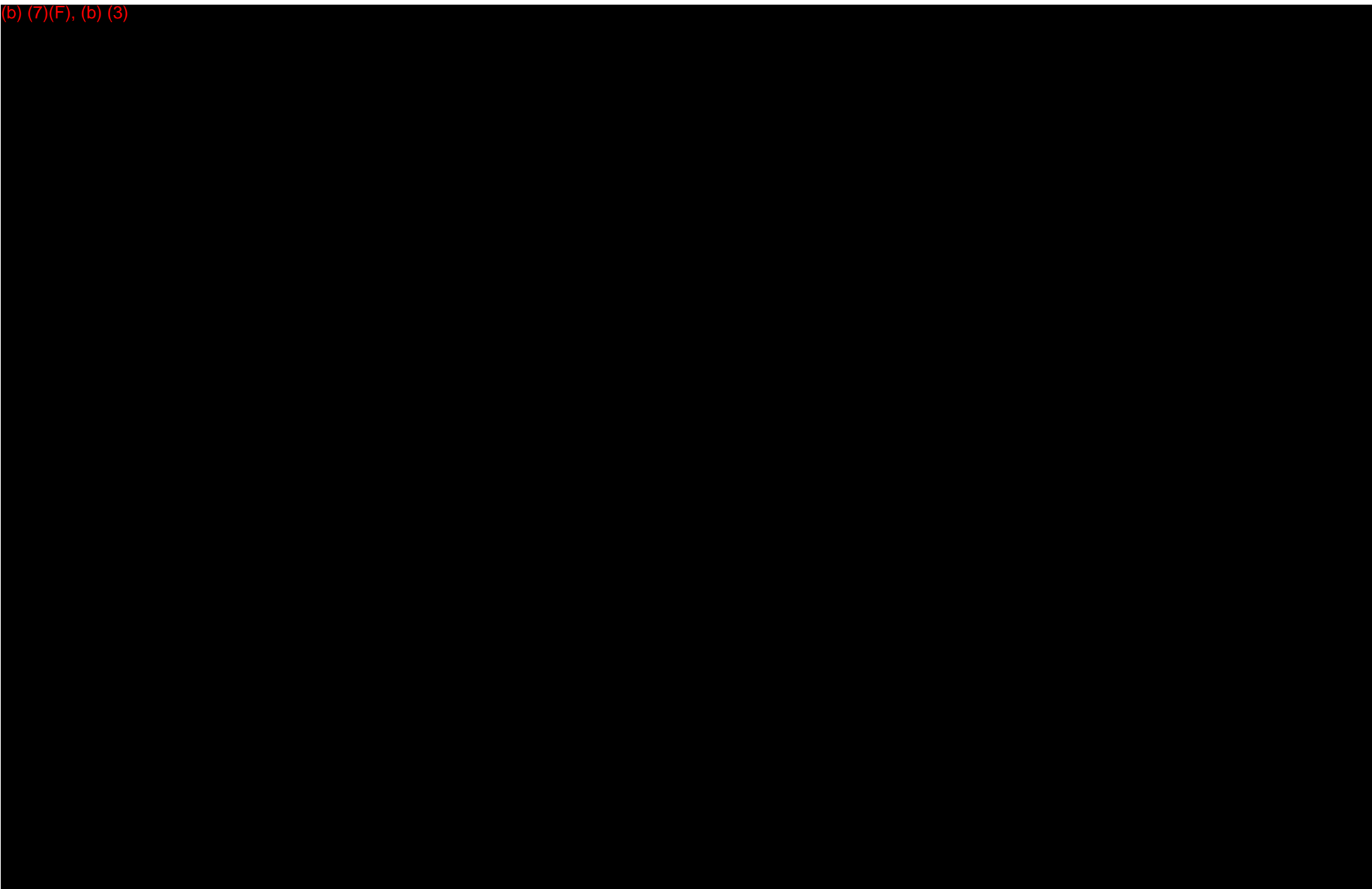
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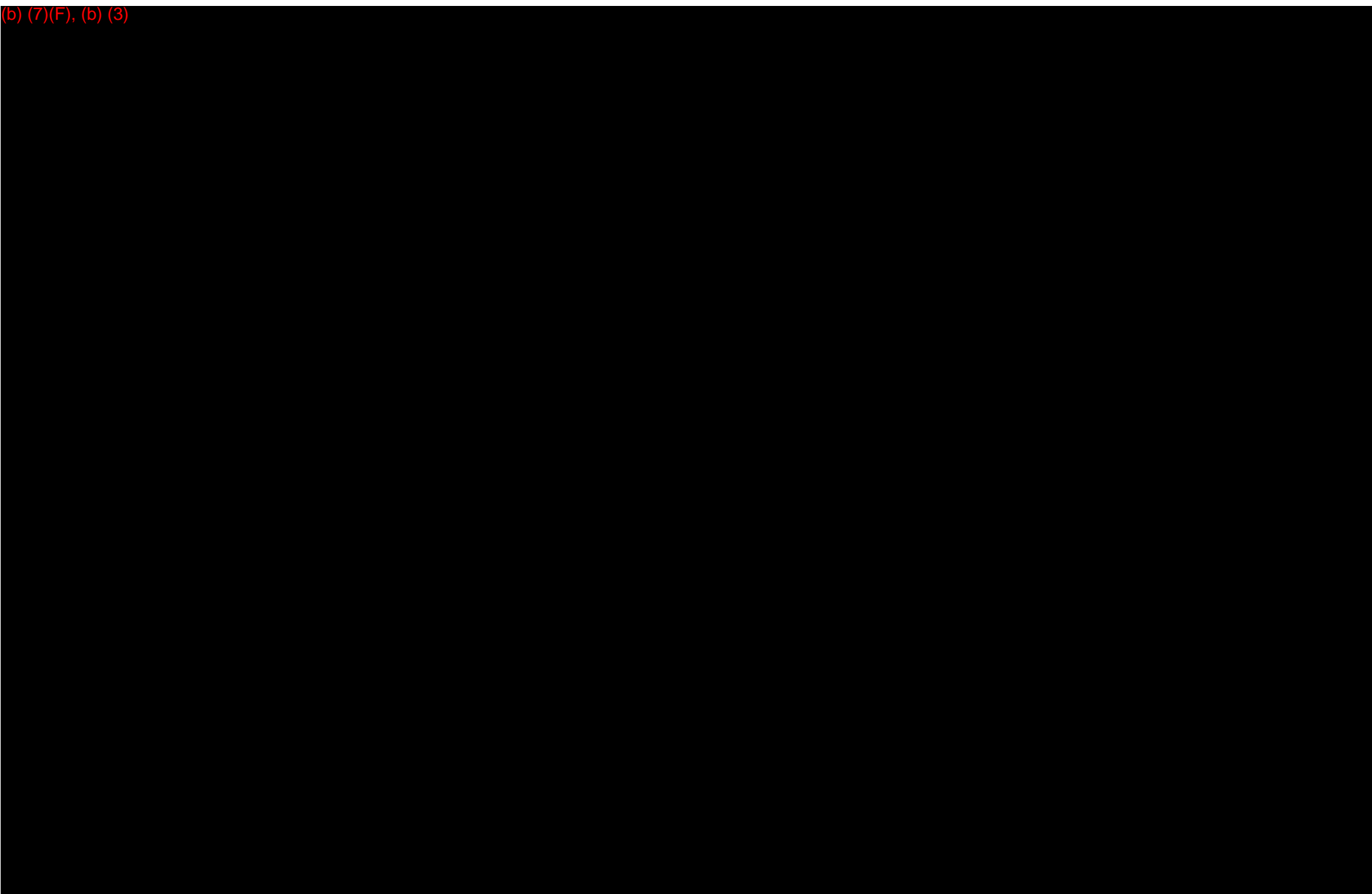
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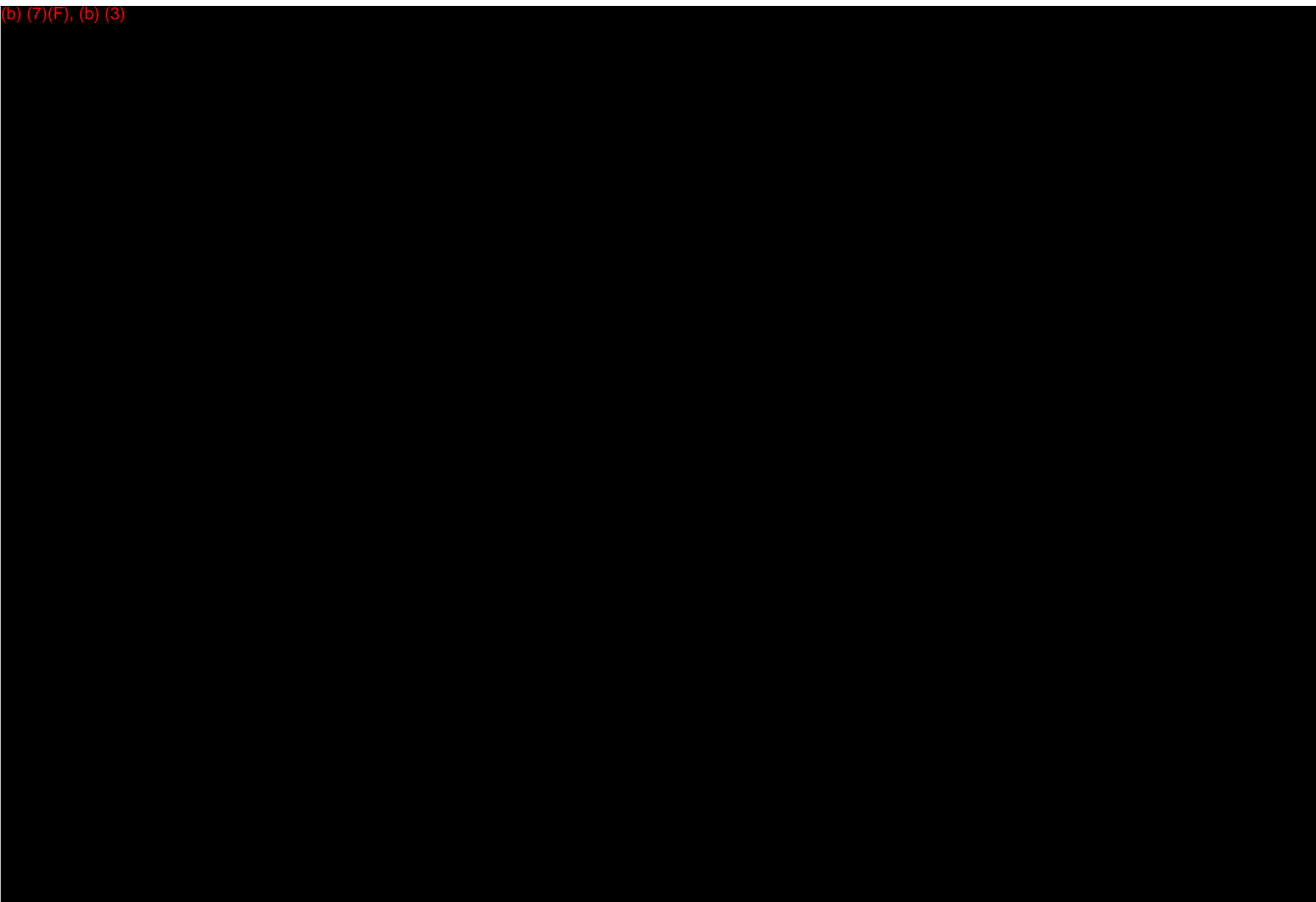
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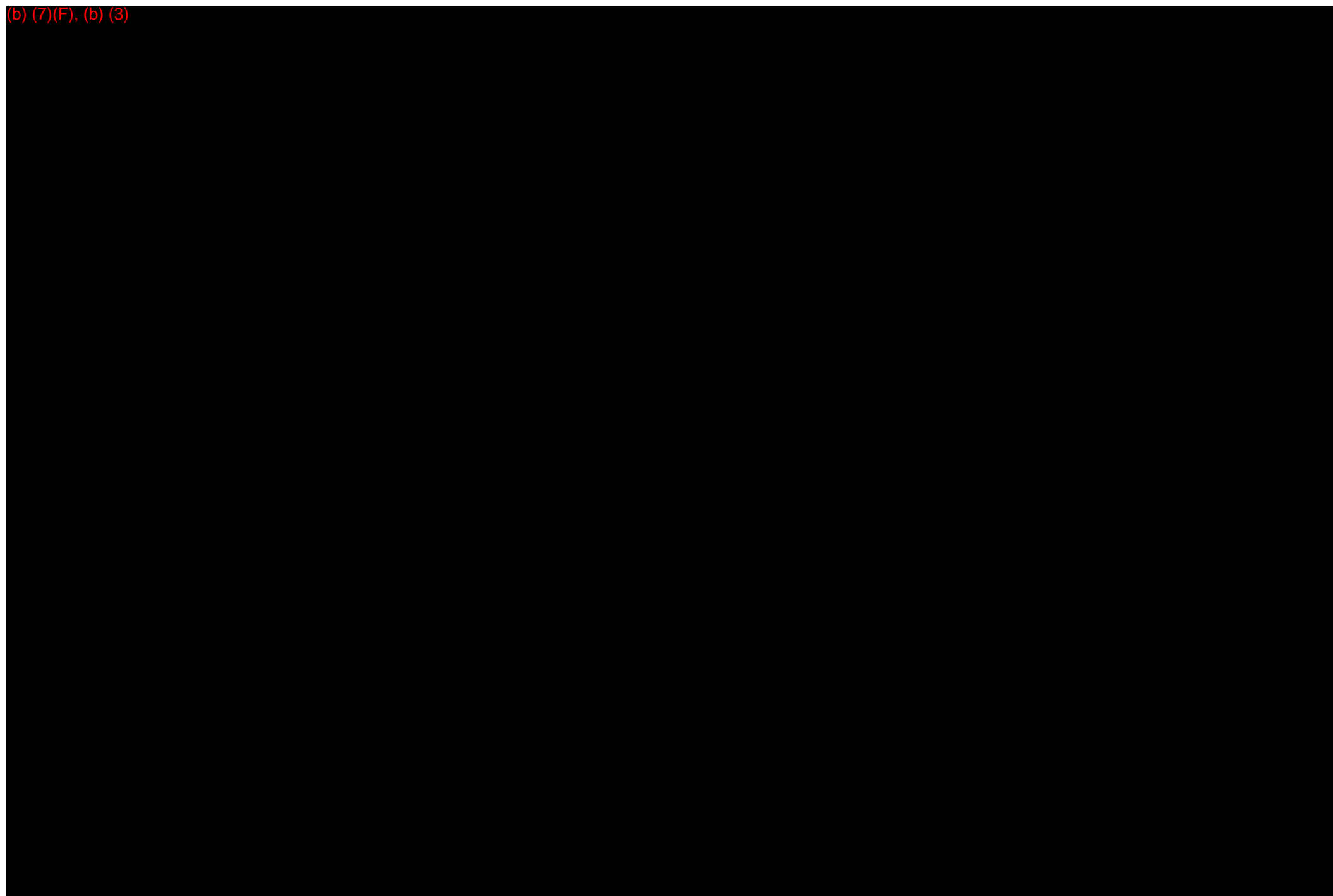
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# **Colonial Pipeline Company**

## **ENVIRONMENTALLY SENSITIVE AREAS**

### **Northeast District**

For more information on Colonial's Areas of Concern USGS maps may be accessed as described:

Colonial Pipeline Company utilizes USGS 7.5 minute (1:24,000 – scale) quadrangle sheets to locate and track significant spills. The USGS has recorded pertinent information on these maps which include 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 which includes pre-located product recovery/monitoring points along all water bodies, equipment needs for each point, qualitative stream velocities, and industrial and municipal water intakes.

This information is available on hard copy and in electronic pdf format.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### **PROTECTION STRATEGIES**

Resource constraints, time constraints, and various response constraints limit the amount of areas, which can be protected during a major oil spill. The following list provides a prioritization of types of areas, which should be protected during an incident.

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 wildlife refuges and game management areas.
  - (b) Wildlife concentrations (which may vary seasonally).
  - (c) Vegetated wetlands and shoreline.
  - (d) Public oyster seed grounds.
  - (e) Commercial and recreational fisheries management areas.
  - (f) Coastal restoration projects.
4. Other Public Lands.
5. Cultural and Historical Sites.
6. Exposed Tidal Flats.
  - (a) Shell beaches and riprap.
  - (b) All other beaches.
7. Sheltered Rocky Shores and Sea Walls.
8. Private Recreational Areas and Facilities.
9. Marinas.
10. Private and Industrial Raw Water Supplies



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### ENVIRONMENTAL SENSITIVE AREAS

(Identified by USCG New York and New Jersey Contingency Plan; USCG Philadelphia Area Contingency Plan;  
and the Environmental Protection Agency)

The following information can also be viewed within the Colonial Pipeline Navigator Software.

**NEWARK BAY – Pages 3-4**

**ARTHUR KILL AND KILL VAN KULL – Pages 5-9**

**RARITAN RIVER – Pages 10-11**

**RARITAN BAY - Pages 12-13**

**PENNSYLVANIA SENSITIVE AREAS – Pages 14-19**

**DELAWARE SENSITIVE AREAS – Pages 19-53**

The following tables include marshes, rivers, creeks, yacht clubs, marina and pipelines, which are  
identified by the USCG and EPA as sensitive areas.

**Colonial Pipeline Points: Delancey St Junction, Newark Junction to Elizabeth Junction, Elizabeth Junction, Staten Island Junction, Mobile Junction, Tremley Point Junction, Gulf Buckeye Junction, Cities Service Junction, Amoco Junction and GATX Junction**

### NEWARK BAY

#### **1. DESCRIPTION**

The Newark Bay is fairly small and moderately shallow with rip-rap and industrial development comprising the majority of the bay shoreline. Use of the shoreline areas is predominately industrial / commercial.

#### **2. WATER CURRENTS**

Currents in the Newark Bay are strongly influenced by tides, but are also affected somewhat by runoff from rain and melting snow. Currents in the bay itself are low to moderate; the maximum expected velocity is 1.8 knots.

#### **3. 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 vent of a spill in the vicinity of a water intake the point of contact should be notified immediately.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 4. ACCESS

The Newark Bay area is accessible by boat and vehicle.

#### 5. SENSITIVE AREAS

Within the Newark Bay area the Hackensack wetlands, Shooters Island and Elizabeth Port Flats (adjacent to the Singer plant) are considered sensitive to oil spills and should be first priority for protection and cleanup measures in the event of a spill. (See table for listing of sensitive areas.)

#### NEWARK BAY SENSITIVE AREAS

SENSITIVE AREA NAME	QUADRANGLE NUMBER	STAGING SITE / PHONE NUMBER
HACKENSACK RIVER	NY-1A	ROANOKE YACHT CLUB (973) 344-9379
PASSAIC RIVER	NJ-18	ROANOKE YACHT CLUB (973) 344-9379
SHOOTERS ISLAND	NJ-18	PORT AUTHORITY BEACH, STATEN ISLAND
OLD PLACE CREEK	NJ-18	ELIZABETH MARINA (908) 828-4296
SINGER FLAT	NJ-18	ELIZABETH MARINA (908) 828-4296
PORT NEWARK CHANNEL	NJ-18	PORT NEWARK FACE PIER
PORT ELIZABETH CHANNEL	NJ-18	PORT NEWARK FACE PIER
MARINERS MARSH	NJ-18	
SLATER PARK	NJ-18	
BRIDGE CREEK	NJ-18	ELIZABETH MARINA (908) 828-4296
MOTBY	NY-1A	MOTBY (201) 823-5111
ELIZABETH RIVER	NJ-18	ELIZABETH MARINA (908) 828-4296
BODINE CREEK	NJ-18	MARINE POWER AND LIGHT (718) 442-8018
ELIZABETH MARINA	NJ-18	ELIZABETH MARINA (908) 828-4296
ATLAS YACHT CLUB	NY-1A	ATLAS YACHT CLUB (201) 858-9605
STATEN ISLAND MARINA	NJ-18	STATEN ISLAND MARINA (718) 442-8018
ROOSEVELT MARINA	NY-1A	ROOSEVELT MARINA (201) 435-3864
ROANOKE YACHT CLUB	NJ-18	ROANOKE YACHT CLUB (201) 344-9397
ELCO MARINA	NY-1A	ELCO MARINA (201) 437-2355
ROBBINS REEF MARINA	NY-1A	ROBBINS REEF MARINA (201) 858-6172
MARINE POWER & LIGHT	NJ-18	MARINE POWER & LIGHT (718) 442-8018
*PSE&G	NJ-18	TWO 20" NATURAL GAS LINES
*TRANSCONTINENTAL GAS	NJ-18	24" NATURAL GAS (908) 862-8600
*PSE&G	NJ-18	16" & 30" NATURAL GAS LINES (201) 430-5075 OR (800) 448-7046
*RSL CONSULTING ENGINEERS, P.C.	NJ-18	SANITARY SEWER (201) 465-5376
*TEXAS EASTERN	NJ-18	GAS (800) 231-7794
*COLONIAL PIPELINE	NJ-18	PETROLEUM
*EXXON CO.	NJ-18	TWO 8" & ONE 12" PETROLEUM (201) 858-6800
*SOHO PIPELINE	NJ-18	PETROLEUM (908) 862-0405
*COASTAL CORP	NJ-18	12" GAS LINE (201) 437-5513



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

SENSITIVE AREA NAME	QUADRANGLE NUMBER	STAGING SITE / PHONE NUMBER
*COASTAL OIL	NJ-18	12" GAS LINE (201) 437-2104
KVK SWIMMING POOL	NY-1A	MARINE POWER & LIGHT (718) 442-8018
AMERADA HESS	NY-1A	MARINE POWER & LIGHT (718) 442-8018
ST. GEORGE FUEL PIER	NY-1A	
CADDELLS DRYDOCK	NJ-18	
TEXACO DOCK	NJ-18	
SALT DOCK	NY-1A	MARINE POWER & LIGHT (718) 442-8018
WALL STREET PAPER	NJ-18	
*pipeline		
Note: Staging areas are recommended by USCG.		

**Colonial Pipeline Points:                      Port Mobile Junction**

### ARTHUR KILL AND KILL VAN KULL

#### 1. DESCRIPTION

The Arthur Kill and Kill Van Kull area has narrow waterways running along the west and north sides of Staten Island, respectively. The shorelines consist of heavy concentrations of industrial docks and wharves with mud flats comprising most of the undeveloped remaining areas. Numerous derelict vessels and rotting docks line the shorelines especially along Staten Island. Several small marinas are located along the Arthur Kill. This area is the largest tidal wetland complex in the Manhattan Hills eco-region; Main Creek, Springville Creek, & Richmond Creek converging from the Fresh Kills Channel.

#### 2. WATER CURRENTS

Currents in the Arthur Kill are primarily tidal and move from low to medium velocities. Fairly strong currents are present in the Kill Van Kull. Maximum expected current velocity is 1.4 knots in the Arthur Kill and 2.7 knots in the Kill Van Kull.

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#### 5. SENSITIVE AREAS

Within the Arthur Kill are wetland areas along the Staten Island shoreline which are very sensitive to oil spills. These are commonly known as Fresh Kills (Richmond Creek), Sawmill Creek, and Neck Creek. There are two waterfowl sensitive areas, Shooters Island and Pralls Island, which are the nesting grounds for many species of birds and are part of Harbor Herons Park, a rookery administered by the Audubon Society. Waterfowl,



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

including geese and ducks, shorebirds, wading birds, raptors, and passerines utilize this area; mammals; possibly turtles (although not confirmed since 1967); freshwater and anadromous fish, shellfish (mussels), and invertebrates. There are nesting areas for waterfowl, shorebirds, and others. It also serves as a stopover during spring and fall for bird migrations. The extensive network of tidal creeks and freshwater inflows provides potential spawning and nursery habitats for resident freshwater and anadromous fish. (See table for listing of sensitive areas.)

### ARTHUR KILL AND KILL VAN KULL SENSITIVE AREAS

SENSITIVE AREA NAME	QUADRANGLE NUMBER	STAGING SITE / PHONE NUMBER
SHOOTERS ISLAND	NJ-18	PORT AUTHORITY BEACH, STATEN ISLAND
OLD PLACE CREEK	NJ-18	ELIZABETH MARINA (908) 828-4196
PRALL'S CREEK	NJ-17	NORTHVILLE LINDEN TERMINAL (908) 862-5740
SAWMILL CREEK	NJ-17	NORTHVILLE LINDEN TERMINAL (908) 862-5740
PRALLS ISLAND	NJ-17	NORTHVILLE LINDEN TERMINAL (908) 862-5740
NECK CREEK	NJ-17	AMOCO OIL MARINE TERMINAL (732) 541-5131 NORTHVILLE LINDEN TERMINAL (908) 862-5740
SINGER FLAT	NJ-18	ELIZABETH MARINA (908) 828-4196
MARINERS MARSH	NJ-18	STATEN ISLAND MARINA (718) 442-8018
SLATER PARK	NJ-18	
BRIDGE CREEK	NJ-18	ELIZABETH MARINA (908) 828-4296
MOTBY	NJ-18	
ELIZABETH RIVER	NJ-18	ELIZABETH MARINA (908) 828-4296
MORSES CREEK	NJ-17	PHELPS DODGE (908) 351-3200
PILES CREEK	NJ-17	NORTHVILLE LINDEN TERMINAL (908) 862-5740
RAHWAY RIVER	NJ-17	AMOCO OIL MARINE TERMINAL (732) 541-5131
BODINE CREEK	NJ-18	MARINE POWER & LIGHT (718) 442-8018
ELIZABETH MARINA	NJ-18	ELIZABETH MARINA (908) 828-4296
ATLAS YACHT CLUB	NY-1A	ATLAS YACHT CLUB (201) 858-9605
ROBBINS REEF MARINA	NJ-18	ROBBINS REEF MARINA (201) 858-9510
MARINE POWER & LIGHT	NY-1A	MARINE POWER & LIGHT (718) 442-8018
*TEXAS EASTERN	NJ-18	GAS (800) 231-7794
*COLONIAL PIPELINE	NJ-18	PETROLEUM
*EXXON CO.	NJ-18	TWO 8" & ONE 12" PETROLEUM (201) 858-6800
*COASTAL OIL	NJ-18	12" OIL
*COLONIAL PIPELINE	NJ-18	PETROLEUM
*EXXON CO.	NJ-18	TWO 8" & ONE 12" PETROLEUM (201) 858-6800
*COLONIAL PIPELINE	NJ-17	PETROLEUM
*COASTAL OIL	NJ-17	12" OIL (718) 656-5746
*BUCKEYE	NJ-17	TWO 12" GAS LINES (718) 656-5746/(908) 862-8952
*COLONIAL PIPELINE	NJ-17	TWO 14" PETROLEUM (404) 261-1471



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

SENSITIVE AREA NAME	QUADRANGLE NUMBER	STAGING SITE / PHONE NUMBER
*TRANSCONTINENTAL GAS	NJ-17	30" NATURAL GAS (908) 862-8600
*COASTAL CORP.	NJ-17	12" GAS (201) 437-5513
*ST SERVICES LINDEN	NJ-17	10" #6 FUEL OIL (908) 862-5740
KVK SWIMMING POOL	NY-1A	MARINE POWER & LIGHT (718) 442-8018
AMERADA HESS	NY-1A	MARINE POWER & LIGHT (718) 442-8018
ST. GEORGE FUEL PIER	NY-1A	
CADDELLS DRYDOCK	NJ-18	
MOTIVA DOCK	NJ-18	
SALT DOCK	NY-1A	MARINE POWER & LIGHT (718) 442-8018
WALL STREET PAPER	NY-1A	
*pipeline		
Note: Staging areas are recommended by USCG.		

### LOWER ARTHUR KILL SENSITIVE AREAS

SENSITIVE AREA NAME	QUADRANGLE NUMBER	STAGING SITE / PHONE NUMBER
SAWMILL CREEK	NJ-17	NORTHVILLE LINDEN TERMINAL (908) 862-5740
PRALLS ISLAND	NJ-17	NORTHVILLE LINDEN TERMINAL (908) 862-5740
NECK CREEK	NJ-17	AMOCO OIL MARINE TERMINAL (732) 541-5131 NORTHVILLE LINDEN TERMINAL (908) 862-5740
FRESH KILL	NJ-17	AMOCO OIL MARINE TERMINAL (732) 541-5131
SMITH CREEK	NJ-16	MUNICIPAL BOAT RAMP
WOODBIDGE CREEK	NJ-16	MUNICIPAL BOAT RAMP
RARITAN RIVER	NJ-16	SANDY POINT BEACH
LEMON CREEK	NJ-17	PRINCESS BAY/SAGUINE POINT
MILL CREEK	NJ-17	TOTTENVILLE MARINA (718) 948-7520
ISLAND OF MEADOWS	NJ-17	AMOCO OIL MARINE TERMINAL (732) 541-5131
MT LORETTO	NJ-17	PRINCESS BAY/SAGUINE POINT
WOLFE'S POND PARK	NJ-17	PRINCESS BAY/SAGUINE POINT
RAHWAY RIVER	NJ-17	AMOCO OIL MARINE TERMINAL (732) 541-5131
CONFERENCE HOUSE PARK	NJ-17A	PRINCESS BAY/SAGUINE POINT
PERTH AMBOY MARINA	NJ-14A	PERTH AMBOY MARINA
TOTTENVILLE MARINA	NJ-16	TOTTENVILLE MARINA
*ST SERVICES- LINDEN TERMINAL CORP.	NJ-17	10" #6 FUEL OIL (908) 862-5740
*COLONIAL PIPELINE	NJ-17	13" PETROLEUM (404) 261-1471
CON-EDISON ARTHUR KILL	NJ-17	
*pipeline		
Note: Staging areas are recommended by USCG.		



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

**Colonial Pipeline Points: GATX Junction, Linden Junction (Booster Station & Delivery), Linden Junction ( Breakout & Tankage), Hess Junction, Shell Junction, Perth Amboy Junction, & Stolt Junction**

### RARITAN RIVER

#### 1. DESCRIPTION

This area includes the segment of the Raritan River from New Brunswick/Highland Park in New Jersey to where it flows into Raritan Bay. It also includes the portion of the South River north Highway 535 in New Jersey to where it joins with the Raritan River. The land usage around the western end of this part of the river mainly consists of residential/commercial as well as some recreational. Where the South River flows into the Raritan there are numerous small creeks that drain a large marsh area. Further east towards the mouth of the Raritan the shoreline consists mainly of industrial/commercial waterfront.

#### 2. WATER CURRENTS

Currents in the Raritan River are largely influenced by tidal action and are fairly low. Maximum expected velocity is as follows: 0.4 to 0.6 knots at flood tide and ebb tide.

#### 3. 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 vent of a spill in the vicinity of a water intake the point of contact should be notified immediately.

(b) (7)(F), (b) (3)

#### 5. SENSITIVE AREAS

The area where the South River flows into the Raritan River is surrounded by a large marsh and wetlands. These areas are very sensitive to oil spills. The wildlife at risk in this area includes alewife, blueback herring, and shad (small runs); striped bass, forage species, including killifish, bay anchovy, menhaden, and blue crab. Nesting birds are located here, including mallard, black ducks, blue/green wing teal, gadwalls, ruddy ducks, coot, Canadian geese, mute swat hooded, red breasted, common mergansers (FA-WI); canvasback, scaup, gadwalls, buffleheads (WI); and mammals. There are spring fish runs. Also a nursery area for striped bass and forage fish; blue crabs are located at the mouth of the Raritan River; nesting area for waterfowl; important open water mergansers and wintering waterfowl; migratory area for pintails and wigeon in October to March. (See table for listing of sensitive areas.)



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### RARITAN RIVER SENSITIVE AREAS

SENSITIVE AREA NAME	QUADRANGLE NUMBER	STAGING SITE / PHONE NUMBER
CITY OF PERTH AMBOY OLD BRIDGE 10'	NJ-14	SR RAMP
NEW BRUNSWICK WATER DEPT. BURNET ST. 10'	NJ-14	ROCKY RANCH RAMP
NEW BRUNSWICK WATER DEPT. GEORGE ST. 10'	NJ-14	ROCKY RANCH RAMP
SAYERVILLE WATER DEPT. OLD BRIDGE 10'	NJ-14A	SR RAMP OR TRUCK IN
*pipeline		
Note: Staging areas are recommended by USCG.		

#### Stolt Junction to Allentown Station

SENSITIVE AREA NAME	QUADRANGLE NUMBER	STAGING SITE / PHONE NUMBER
SOUTH RIVER	NJ-14	
WASHINGTON CANAL	NJ-14	
LAWRENCE BROOK	NJ-14	
PARRINGTON LAKE	NJ-14	
IRELAND BROOK	NJ-14	
PIGEON SWAMP STATE PARK	NJ-14	
SHALLOW BROOK	NJ-13	
CEDAR BROOK	NJ-13	
BRAINERD LAKE	NJ-12	
LAKE MANALAPAN	NJ-13	
MANALAPAN BROOK	NJ-13	
MILLSTONE RIVER	NJ-12	
ROCKY BROOK	NJ-12	
PEDDLE LAKE	NJ-12	
ETRA LAKE	NJ-12	
ASSUNPINK WILDLIFE MGT. AREA	NJ-11	
LAKE ASSUNPINK	NJ-11	
ASSUNPINK CREEK	NJ-11	
CROSSWICKS CREEK	NJ-10	
DOCTORS CREEK	NJ-10	
MILPOND POND	NJ-11	
NEGRO RUN	NJ-11	
*pipeline		
Note: Staging areas are recommended by USCG.		



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### RARITAN BAY

##### 1. DESCRIPTION

The Raritan Bay area encompasses Raritan Bay, Sandy Hook Bay, and the tidal portion of the Raritan River. The combined area of Raritan and Sandy Hook bays is fairly large, moderately shallow, and open on the east side of the Lower New York Bay and the Atlantic Ocean. The shoreline is primarily sand/pebble beaches with large wetlands associated with the Raritan River and numerous creeks along the southern shoreline. Usage is largely recreational and concentrated at the larger beaches, marinas, and boat harbors.

##### 2. WATER CURRENTS

Currents in the Raritan Bay area are primarily tidal induced except in the Raritan River which is largely affected by runoff. The current velocities are relatively low with a maximum of 1.1 knots in Raritan Bay and 1.8 knots in the Raritan River at Perth Amboy.

(b) (7)(F), (b) (3)

##### 5. SENSITIVE AREAS

The Raritan Bay area contains many locations, which are particularly sensitive to spills. The primary sensitivity factors deal with shellfisheries, waterfowl nesting, public use, and creeks with adjacent wetlands. (See table for listing of sensitive areas.)

#### RARITAN BAY SENSITIVE AREAS

SENSITIVE AREA NAME	QUADRANGLE NUMBER	STAGING SITE / PHONE NUMBER
LEMON CREEK	NJ-17	PRINCESS BAY/SAGUINE POINT
MT LORETTO	NJ-17	PRINCESS BAY/SAGUINE POINT
CHEESEQUAKE CREEK	NJ-17A	ZUBAK'S MARINA (732) 727-3953
WAGNERS MARINA	NJ-17A	WAGNERS MARINA (732) 583-6930 (732) 556-5821 (NIGHT)
ATLANTIC HIGHLANDS MARINA	N/A	ATLANTIC HIGHLANDS MUNICIPAL MARINA (732) 291-1670 (732) 681-1425 (NIGHT)
LEMON CREEK MARINA	NJ-17	LEMON CREEK MARINA (718) 943-9766
USCG STA SANDY HOOK	N/A	USCG STA SANDY HOOK (732) 872-3428
*TRANSCONTINENTAL GAS	NJ-17A	GAS LINE (908) 862-8600
JAMES J. HOWARD MARINE SAFETY LABORATORY	N/A	(908) 880-8534 (PAGER) (908) 872-1558 (OFFICE) (OPERATES AT 350-400 GPM (24 HRS). INTAKE IS LOCATED 3-4' BELOW SANDY BOTTOM)
*pipeline		
Note: Staging areas are recommended by USCG.		



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

**Colonial Pipeline Points: Allentown Junction to Trenton DF to Pennsauken Junction (Breakout Tankage ) and Pennsauken Junction (Booster Station & Delivery)**

### PENNSYLVANIA SENSITIVE AREAS

USCG SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
DUCK CREEK	NJ-10
DELAWARE RIVER	NJ-8, NJ-10
CROSSWICKS CREEK	NJ-8, NJ-10
NEWBOLD ISLAND	NJ-8, NJ-10
BILES CREEK	NJ-8, NJ-10
ASSISCUNK CREEK	NJ-8
CRAFTS CREEK	NJ-8
DREDGE HARBOR	NJ-8A
EPA WATER INTAKE	
WATER INTAKE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	
EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
MORRISVILLE BOROUGH MUNICIPAL WATER WORKS	NJ-10A
(b) (7)(F), (b) (3)	
PENN WARNER CLUB	NJ-10A
PENNSBURY MANOR STATE PARK	NJ-10A



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

**Colonial Pipeline Points: Pennsauken Junction (Breakout Tankage ) and Pennsauken Junction (Booster Station & Delivery) to Pennsauken DF**

### PENNSYLVANIA SENSITIVE AREAS

USCG SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
PENNYPACK CREEK	N/A
POMPESTON CREEK	N/A
PENNSAUKEN CREEK	NJ-5
DELAWARE RIVER	NJ-5
FRANKFORD CREEK, PA	NJ-5
COOPER RIVER	NJ-5
EPA WATER INTAKE	
WATER INTAKE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	
EPA SENSITIVE AREA	
SENSITIVE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	
PENNYPACK CREEK	N/A
TACONY CREEK	N/A
(b) (7)(F), (b) (3)	
FRANKFORD CREEK	NJ-5
(b) (7)(F), (b) (3)	
COOPER RIVER LAKE	NJ-5
GARDEN STATE PARK	NJ-5



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

**Colonial Pipeline Points: Woodbury, Woodbury DF, Crown Point Junction, Paulsboro DF, Eagle Point Junction, Koch Fuels DF, Fort Mifflin DF, Girard Point DF, Swann Junction, Keystone Junction and Hess Junction**

### PENNSYLVANIA SENSITIVE AREAS

#### USCG SENSITIVE AREA

SENSITIVE AREA NAME	QUADRANGLE NUMBER
LITTLE TIMBER CREEK	GIR-2
BIG TIMBER CREEK	GIR-2
WOODBURY CREEK	NJ-3
MAIN DITCH	NJ-3
MANTUA CREEK	NJ-3
LITTLE TINICUM ISLAND	NJ-2

#### EPA WATER INTAKE

WATER INTAKE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	

#### EPA SENSITIVE AREA

SENSITIVE AREA NAME	QUADRANGLE NUMBER
PHILADELPHIA GAS WORKS	GIR-2
PHILADELPHIA ELECTRIC CO.	GIR-2
PHILADELPHIA ELECTRIC – DE	GIR-2
RIVER ASSOC. INC.	GIR-2
GLORIA DEI (OLD SWEDES CHURCH) NATIONAL	GIR-2
PHILADELPHIA REGULATORY PORT AUTHORITY	GIR-2
PECO – SOUTHWARK GENERATING STATION	GIR-2
PACKER AVENUE MARINE TERMINAL (HOLT CARG)	GIR-2
PEREGRINE FALCON	GIR-2
BELL FUEL CORP.	GIR-2
ROOSEVELT PARK	GIR-2
FAIRMOUNT DAM	GIR-2



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

<b>EPA SENSITIVE AREA</b>	
FC HAAB CO. INC.	GIR-2
PECO – SCHUYLKILL GENERATING STATION	GIR-2
ATLANTIC REFINING & MARKETING CO.	GIR-2
SCHUYLKILL RIVER	GIR-2
AMERADA HESS	GIR-2
BARTRAM GARDENS	GIR-2
DIAMOND PETROLEUM	GIR-2
PIONEER OIL CO.	GIR-2
AMOCO OIL CO.	GIR-2
EXXON CO. USA	GIR-2
CHEVRON USA INC., PHILADELPHIA	GIR-2
CHEVRON GIRARD POINT	GIR-2
CHEVRON HOG ISLANDS	GIR-2
CHEVRON SLUDGE PROCESSING AND DIST.	GIR-2
CHEVRON WATER POLLUTION CONTROL	GIR-2
EAST MUD ISLAND	GIR-2
ATLANTIC FORT MIFFLIN (SUN PIPELINE)	GIR-2
FORT MIFFLIN	GIR-2
TINICUM NATIONAL ENVIRONMENTAL CENTER	GIR-2
TINICUM WILDLIFE PRESERVE	GIR-2
MULTI FLEX SPRING & WIRE CO.	N/A
PA FISH COMMISSION	NJ-2
TINICUM PROPERTIES ASSOC. INC.	NJ-2
TINICUM PROP. ASSOC. LTD.	NJ-2
PHILADELPHIA ELECTRIC CO. – EDDYSTONE	NJ-2
PHILADELPHIA ELECTRIC	NJ-2
CRUM CREEK	NJ-2
DARBY CREEK	NJ-2
TINICUM MARSH & LITTLE TINICUM ISLAND	NJ-2
LITTLE TINICUM ISLAND	NJ-2
REPAUPO CREEK	NJ-2
LITTLE TIMBER CREEK	NJ-2



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

EPA SENSITIVE AREA	
NEHANSEY BROOK	NJ-2

**Colonial Pipeline Points: Woodbury, Booth DF and Brandywine Station**

### PENNSYLVANIA SENSITIVE AREAS

USCG SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
AUNT DEBS DITCH	NJ-2
CEDAR SWAMP	NJ-2
RACCOON CREEK	PA-6
STONEY CREEK	PA-6
OLDMANS CREEK	PA-6
EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
RIDLEY CREEK	NJ-2
CHESTER WATER AUTHORITY	NJ-2
DELAWARE COUNTY REQUIRED WATER QUALITY	NJ-2
SCOTT PAPER CO.	NJ-2
PQ CORP. (CHESTER WORKS)	NJ-2
BALDWIN RUN	NJ-1
PETRON	NJ-1
MARCUS HOOK	NJ-1
STILL RUN	NJ-2
WARRINGTON MILLPOND	NJ-2
BRANDYWINE RACEWAY	PA-5
BRANDYWINE CREEK	PA-5
PALMER STATE PARK	MD-13
DEER CREEK	MD-13



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### DELAWARE SENSITIVE AREAS

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
DELAWARE RIVER UPPER SHORELINE	NONE LISTED
NAAMANS CREEK	NONE LISTED
GENERAL CHEMICAL CORP.	NONE LISTED
CITISTEEL USA, INC.	NONE LISTED
STONEY CREEK	NONE LISTED

**Colonial Pipeline Points: Brandywine Station, Landenburg Station to Conowingo Station**

#### PENNSYLVANIA SENSITIVE AREAS

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
BRANDYWINE BATTLEFIELD	PA-5N
GOAT HILL SERPENTINE BARRENS	MD-16
BIG ELK CREEK	PA-2
NORTHEAST CREEK	MD-16
SUSQUEHANNA STATE PARK	MD-15
SUSQUEHANNA RIVER	MD-15
CONOWINGO DAM	MD-15

#### DELAWARE SENSITIVE AREAS

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
WILSON'S RUN	PA-5
BEAVER RUN	PA-5
HOOPES RESERVOIR	PA-4
TIDAL FLATS ALONG CHRISTINA RIVER	PA-2







# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
NW HARBOR	NBALT-5
FORT MCHENRY	NBALT-5
COLGATE CREEK	NBALT-5
SWANN PARK	NBALT-5
MIDDLE BRANCH	NBALT-5
MARYLAND YACHT CLUB	NBALT-5
(b) (7)(F), (b) (3)	
BROENING PARK	NBALT-5
MARYLAND DARTER	MD-13
SHORTNOSE STURGEON	MD-13
ESSEX (BACK RIVER) & CHESACO PARK (RESIDENTIAL)	NBALT-5A
ROCKBURN BRANCH PARK	CB-4
CENTENNIAL PARK	CB-4
PATUXENT RIVER	CB-3
PATAPSCO RIVER	CB-6
PATAPSCO VALLEY STATION	CB-6
CURTIS BAY STATION – USCG	CB-6
CURTIS BAY	CB-6
CALVIN BRANCH	CB-6
CURTIS CREEK – BALTIMORE HARBOR	CB-6
SOLLERS POINT	CB-6
BALTIMORE HARBOR SHORELINE	CB-6
FORT AMISTEAD PARK	CB-6
STONY RUN STREAM	MD-10B
BALTIMORE / S. BALTIMORE	MD-10B
BWI AIRPORT FARM & FUELING ISLAND	MD-10B
PATAPSCO VALLEY STATE PARK	CB-3
BALD EAGLE	CB-3
HENRYTON STATE HOSPITAL	CB-2
PATUXENT RIVER STATE PARK	MD-5



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	
SENECA CREEK STATE PARK	MD-3
(b) (7)(F), (b) (3)	
BLOCKHOUSE POINT PARK	VA-38
(b) (7)(F), (b) (3)	
MIDDLE PATUXENT RIVER	WASH-5
HARMOND BRANCH	WASH-5
HOWARD DUCKETT RESERVOIR	WASH-5
(b) (7)(F), (b) (3)	
GREENBELT PARK	WASH-7
BALTIMORE-WASHINGTON PARKWAY	WASH-7
(b) (7)(F), (b) (3)	
ANACOSTIA RIVER PARK	WASH-7
KENILWORTH AQUATIC GARDENS	WASH-7
HICKEY RUN	WASH-7
NATIONAL ARBORETUM	WASH-7
BRENTWOOD MAINTENANCE	WASH-7
MCMILLAN PARK RESERVOIR	WASH-8
MCMILLAND RESERVOIR	WASH-8
PIERCE MILL	WASH-8
ROCK CREEK PARK & PINEY BRANCH PARKWAY	WASH-8
NATIONAL ZOOLOGICAL PARK	WASH-8
KLINGLE VALLEY PARKWAY	WASH-8
DUKE ELINGTON BRIDGE (CALVERT STREET BRIDGE)	WASH-8
TAFT BRIDGE	WASH-8
KALORAMA TRIANGLE HISTORIC DISTRICT	WASH-8
DUMBAR BRIDGE (BUFFALO BRIDGE)	WASH-8



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
ROCK CREEK & ITS TRIBUTARIES	WASH-8
AMERICAN ELM	WASH-8
LITTLE GUNPOWDER FALLS	MD-11
LITTLE GUNPOWDER STATE PARK	MD-12, NBALT-3 & 3
LOCH RAVEN RESERVOIR	NBALT-3
(b) (7)(F), (b) (3)	
NORTHWEST HARBOR	NBALT-5
(b) (7)(F), (b) (3)	
BALTIMORE & OHIO AMTRAK	NBALT-5
(b) (7)(F), (b) (3)	
BALTIMORE CEMETERY	NBALT-5
ST. JOSEPHS HOSPITAL	NBALT-5
(b) (7)(F), (b) (3)	
PATAPSCO RIVER	NBALT-5
BACK RIVER	NBALT-5A
(b) (7)(F), (b) (3)	
LIBERTY LAKE	MD-7
MORGAN RUN NATURAL ENVIRONMENTAL AREA	MD-7
HUGG THOMAS WILDLIFE MANAGEMENT AREA	CB-2
PFEFFERKORN NATURAL ENVIRONMENTAL AREA	CB-2
PATUXENT RIVER	MD-4
HAWLINGS RIVER	MD-5A



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
RACHEL CARSON CONSERVATION PARK	MD-5A
(b) (7)(F), (b) (3)	
GOSHEN REGIONAL PARK	MD-3
GOSHEN BRANCH STREAM VALLEY PARK	MD-3
GREAT SENEDA EXTENSION STREAM VALLEY PARK	MD-3
INSPIRATION LAKE	MD-3A
BLOCKHOUSE POINT PARK	VA-38
WATKINS ISLAND	VA-38
NORTHERN VIRGINIA REGIONAL PARK	VA-38
LOWES ISLAND	VA-38
NICHOLS RUN	VA-38

**Colonial Pipeline Points: Gaithersburg Station to Dulles DF, Chantilly Station, Fairfax DF, Bull Run DF**

### DELAWARE SENSITIVE AREAS

EPA WATER INTAKE	
WATER INTAKE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	

### DELAWARE AND EASTERN PENNSYLVANIA

For spills within the Delaware River, one of the highest priorities is protection of the following five tributaries which each lead to large areas of environmentally-sensitive wetlands:

- a. Mantua Creek
- b. Darby Creek
- c. Raccoon Creek
- d. Oldman's Creek
- e. Big Timber Creek



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

There are several naturally occurring factors, which must be taken into account for response actions within the Delaware River:

- a. The rivers are tidal in nature and pollutants will spread upstream and downstream depending upon the state of the tide. Generally, pollutants in the Delaware River will travel approximately four miles upstream during the flood cycle and five miles downstream during the ebb. Wind direction and speed play a critical role while free-floating oil remains on the water.
- b. The river's natural flow will cause high current velocities, which will have a drastic effect on any booming efforts. Deflective booming will be most effective, deflecting oil away from environmentally sensitive areas or corralling it into the river's natural collection points.
- c. Since the river is long and narrow, any medium or major spill is likely to affect both banks for several miles up and down the shoreline.
- d. **Heavy traffic along the Delaware River will require the control of vessel traffic in the area of the discharge.**

### DELAWARE RIVER

Along the Delaware River, several wildlife preserves exist. Tinicum National Environmental Center, a large wildlife preserve just south of the City of Philadelphia, is located between two of the largest oil receiving facilities on the river. Another preserve, Bombay Hook National Wildlife Refuge, is located on the lower reaches of the Delaware River. Prime Hook National Wildlife Refuge is located on the shores of the Delaware Bay just northwest of Cape Henlopen. All three of these areas are primarily marshes or wetlands and support a variety of waterfowl, wading birds, shorebirds, raptors, and shellfish, including some species on the U.S. Endangered Species List. The state of Delaware has designated most of its coastline as Delaware Seashore State Park.

### OLDMANS CREEK (QUADRANGLE NUMBER – PA-6)

#### 1. PHYSICAL DESCRIPTION

None listed.

#### 2. SHORELINE TYPES

Gravel beaches / riprap; exposed tidal flats; marshes; and man-made structures.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Teal, sura rail, black duck, pintail, mallards, Canada geese, wading birds, and anadromous fish.

**HABITAT:** Tidal wild rice.

**THREATENED/ENDANGERED:** Bald eagles, wintering and feeding summers.

#### STONEY CREEK (QUADRANGLE NUMBER – PA-6)

##### 1. PHYSICAL DESCRIPTION

Small cove where Stoney Creek joins main-stem river.

##### 2. SHORELINE TYPES

Sand and gravel beaches; and marshes.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Some waterfowl, anadromous fish use shallows as they migrate out.

**HABITAT:** Mud flats and shallow water area.

**THREATENED/ENDANGERED:** None listed.

#### RACCOON CREEK – QUADRANGLE NUMBER – PA-6

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; exposed tidal flats; marshes; and man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Teal, sora rail, pintail, black ducks, mallards, Canada geese, and assorted wading birds and anadromous fish.

**HABITAT:** Wild rice tidal marsh.

**THREATENED/ENDANGERED:** Bald eagle – winter, spring and summer.

#### DARBY CREEK (QUADRANGLE NUMBER – NJ-2)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; sheltered rocky shores; sheltered tidal flats; and marshes.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Numerous waterfowl species in fall, winter, spring; and some species breeding in summer (black duck, mallard, wood duck, Canada goose). Wading birds, including many foraging black-crowned night herons. Nine species of wading birds from Pea Patch Island tidal

**flats.** Large numbers of shorebirds on tidal flats in spring and fall. River otters and muskrats, turtles, and anadromous fish on Pea Patch Island.

**HABITAT:** 250 acres of undisturbed fresh water tidal marsh – very diverse (wild rice included). Tidal flats. Nursery areas for anadromous fish. Nursery areas for anadromous fish.

**THREATENED/ENDANGERED:** Great egret is a state listed species. Coast plain leopard frog, also state listed. Peregrine falcons and bald eagles also use the area in spring, summer and fall. Red-bellied turtle is a species of concern, tidal lagoons are nursery for striped bass. River otters reported at risk in PA.

#### LITTLE TINICUM ISLAND (QUADRANGLE NUMBER – NJ-2)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Sand and gravel beaches; sheltered rocky shores; sheltered tidal flats; and marshes.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Numerous waterfowl species fall, winter and spring; some species breeding in summer (black duck, mallard, Canada goose). Wading birds in fall, summer and spring. Gulls and terns spring, summer and fall. Many species of anadromous and riverine fish throughout the area. Year round, with striped bass spawning in spring. Shorebirds may concentrate on tidal flats during spring.

**HABITAT:** Tidal marshes, sheltered tidal flats, mixed sand and gravel beaches.

**THREATENED/ENDANGERED:** Striped bass spawning area adjacent to island. Shorebirds may concentrate on tidal flats in spring.

#### AUNT DEBS DITCH (QUADRANGLE NUMBER - NJ-2)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; and marshes.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Anadromous fish, waterfowl concentrations.

**HABITAT:** Tidal marshes and shallows.

**THREATENED/ENDANGERED:** Osprey, bald eagle, and peregrine falcons.

#### CEDAR SWAMP (QUADRANGLE NUMBER – NJ-2)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Gravel beaches ./ riprap; marshes; and man-made structures.

#### 3. RESOURCES AT RISK

**WILDLIFE:** Anadromous fish.

**HABITAT:** Cedar Swamp / tidal fresh.

**THREATENED/ENDANGERED:** Bald eagles, osprey, and peregrine falcons.

#### MAIN DITCH (QUADRANGLE NUMBER – NJ-3)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; exposed tidal flats; and sheltered tidal flats.

#### 3. RESOURCES AT RISK

**WILDLIFE:** Waterfowl – wading birds, anadromous fish.

**HABITAT:** Tidal mud flats.

**THREATENED/ENDANGERED:** Bald eagles and osprey.

#### MANTUA CREEK (QUADRANGLE NUMBER – NJ-3)

##### 1. PHYSICAL DESCRIPTION

None listed.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 2. SHORELINE TYPES

Gravel beaches / riprap; sheltered tidal flats; marshes; and man-made structures.

#### 3. RESOURCES AT RISK

WILDLIFE: **None listed.**

HABITAT: **None listed.**

THREATENED/ENDANGERED: **None listed.**

### WOODBURY CREEK (QUADRANGLE NUMBER – NJ-3)

#### 1. PHYSICAL DESCRIPTION

None listed.

#### 2. SHORELINE TYPES

Gravel beaches / riprap; marshes and man-made structures.

#### 3. RESOURCES AT RISK

WILDLIFE: **Abundant waterfowl spring, summer and fall. Sora rail and anadromous fish.**

HABITAT: **Wild rice tidal.**

THREATENED/ENDANGERED: **Bald eagles, osprey and peregrine falcon.**

### BIG TIMBER CREEK (QUADRANGLE NUMBER – GIR-2)

#### 1. PHYSICAL DESCRIPTION

None listed.

#### 2. SHORELINE TYPES

Sheltered tidal flats; marshes; and man-made structures.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Waterfowl and anadromous fish.

**HABITAT:** Tidal wild rice.

**THREATENED/ENDANGERED:** Bald eagles, osprey, and peregrine falcons.

#### LITTLE TIMBER CREEK (QUADRANGLE NUMBER – GIR-2)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Sheltered tidal flats; marshes; and man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Waterfowl and anadromous fish.

**HABITAT:** Riverine / wild rice.

**THREATENED/ENDANGERED:** Peregrine falcons.

#### DELAWARE RIVER TIDAL FLAT, NJ (QUADRANGLE NUMBER – NJ-5)

##### 1. PHYSICAL DESCRIPTION

Tidal flats and shallows.

##### 2. SHORELINE TYPES

Fine sand beaches; gravel beaches / riprap; and marshes.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Some migrant waterfowl may use area, wading birds may forage on the tidal flat, the area may also provide nursery habitat to some fish species.

**HABITAT:** Riverine tidal flat, with small areas of Plastron forested and scrub-shrub wetlands on the southern side of the mouth and on the eastern side of the flats.

**THREATENED/ENDANGERED:** Peregrine falcons.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### FRANKFORD CREEK, PA (QUADRANGLE NUMBER – NJ-5)

##### 1. PHYSICAL DESCRIPTION

Tidal gravel flats.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; and exposed tidal flats.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding / nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Tidal gravel flats.

**THREATENED/ENDANGERED:** A cursory review of the PNDI system shows numerous plants, animals and habitats of concern in PA. These include shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

#### PENNSAUKEN CREEK (QUADRANGLE NUMBER – NJ-5)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Sand and gravel beaches; exposed tidal flats; and marshes.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Canada geese, black duck, mallards, and pintails use the area, especially near the river. Anadromous fish use the shallows moving.

**HABITAT:** Riverine tidal flat on south side of mouth, Palustrine seasonally tidal emergent wetlands, Palustrine emergent wetlands, Palustrine scrub-shrub wetland. Freshwater tidal marsh is listed as a “RARE COMMUNITY” in the state of NJ.

**THREATENED/ENDANGERED:** Short nosed sturgeon.

#### COOPER RIVER (QUADRANGLE NUMBER – NJ-5)

##### 1. PHYSICAL DESCRIPTION

None listed.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 2. SHORELINE TYPES

Gravel beaches / riprap; exposed tidal flats; and man-made structures.

#### 3. RESOURCES AT RISK

**WILDLIFE:** Canada geese, pintails in spring, black duck and mallards in winter. Anadromous fish.

**HABITAT:** Riverine

**THREATENED/ENDANGERED:** N/A

### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

#### 1. PHYSICAL DESCRIPTION

At the old Frankford Arsenal, just north of the Tacony-Palmyra bridge. Tidal mud flats with rooted aquatic vegetation.

#### 2. SHORELINE TYPES

Exposed tidal flats.

#### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada Geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding / nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Riverine tidal flat with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

#### 1. PHYSICAL DESCRIPTION

At the old Frankford Arsenal, just south of the Tacony-Palmyra bridge. Tidal gravel flat, boat ramp, anchorage, and marina.

#### 2. SHORELINE TYPES

Exposed tidal flats; and man-made structures.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada Geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding / nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Riverine tidal flat with rooted aquatic vegetation.

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

#### PENNYPACK CREEK, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

The mouth of Pennypack Creek consists of tidal mud flats with aquatic vegetation (spatterdock).

##### 2. SHORELINE TYPES

Exposed tidal flats; and sheltered tidal flats.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada Geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding / nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The mouth of Pennypack Creek consists of tidal mud flats with aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

The area around the old Northern Metals Terminal, in the Tacony Section of Philadelphia. Marine terminal / industry site/ bulkheads.

##### 2. SHORELINE TYPES

Man-made structures.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** These areas provide cover for smaller species of fish, and may also serve as nursery waters.

**HABITAT:** The shoreline consists of bulkheads.

**THREATENED/ENDANGERED:** Fish utilizing these areas include species of concern in the Pennsylvania and federally endangered species, such as shortnose sturgeon, banded sunfish, and striped bass.

#### POMPESTON CREEK (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Riverine tidal flats at the mouth of the creek.

##### 2. SHORELINE TYPES

Marshes; and man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Pompeston Creek may support both migrant and nesting waterfowl, wading birds, and other species that are characteristic of a freshwater wetland community. Various species of anadromous, estuarine, and freshwater fish may also occur.

**HABITAT:** Some sensitive wetlands occur along Pompeston Creek, with some small areas of Palustrine seasonally tidal emergent and scrub-shrub wetlands.

**THREATENED/ENDANGERED:** Peregrine falcon

#### DELWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Located in the Bridesburg section of Philadelphia, PA. Tidal gravel flats, including boat ramps, and anchorages for pleasure craft.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; exposed tidal flats; and man-made structures.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Riverine tidal gravel flat with rooted Aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

In the Tacony section of Philadelphia, across the river from Riverton, NJ. Tidal gravel flats.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; and exposed tidal flats.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shoreline consists of a riverine tidal gravel flat.

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

#### DELAWARE RIVER, PA ( QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Between Croydon, PA, to the west and Bristol, PA to the east, north of West Burlington, NJ. The shoreline consists of a riverine tidal gravel flat with rooted aquatic vegetation (spatterdock).

##### 2. SHORELINE TYPES

Sand and gravel beaches; riprap; and exposed tidal flats.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shoreline consists of a riverine tidal gravel flat with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Along the Delaware River between the Poquessing Creek, and Neshaminy Creek. The shoreline consists of a riverine tidal gravel flat. It includes a boat ramp at Neshaminy State Park, and several other boat ramps, anchorages, and marinas.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; exposed tidal flats; and man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shoreline consists of a riverine tidal gravel flat. It includes a boat ramp at Neshaminy State Park, and several other boat ramps, anchorages, and marinas.

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

#### NESHAMINY CREEK, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

The mouth of the Neshaminy Creek, and the adjoining shoreline consists of tidal mud flats, with rooted aquatic vegetation.

##### 2. SHORELINE TYPES

Exposed tidal flats; sheltered tidal flats; marshes; and man-made structures.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:**

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

### RANCOCAS CREEK, NJ

#### 1. PHYSICAL DESCRIPTION

None listed.

#### 2. SHORELINE TYPES

Fine sand beaches; exposed tidal flats; sheltered tidal flats; marshes; and man-made structures.

#### 3. RESOURCES AT RISK

**WILDLIFE:** The wetlands that occur along Rancocas Creek are likely to support both migrant and nesting waterfowl, wading birds, and many species that area characteristic of a freshwater wetland community. Various species of anadromous, estuarine, and freshwater fish are also very likely to occur in Rancocas Creek.

**HABITAT:** Highly sensitive wetland occur on Rancocas Creek. Riverine tidal flats, vast areas of Palustrine seasonally tidal emergent wetlands, Palustrine emergent wetlands, Palustrine scrub-shrub wetlands, and Palustrine forested wetlands. Has been placed on NJ "RARE COMMUNITY" list.

**THREATENED/ENDANGERED:** Concern about wood turtles year round. Also used extensively for feeding by great blue herons. There are large strands of wild rice.

### DREDGE HARBOR, NJ (QUADRANGLE NUMBER – NJ-8A)

#### 1. PHYSICAL DESCRIPTION

A small harbor with marinas, and tidal flats.

#### 2. SHORELINE TYPES

Fine sand beaches; Gravel beaches / riprap; and marshes.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Extended use by Canada geese, mallards, and pintails, as well as anadromous fish in spring and fall. Wading birds may forage on the tidal flats.

**HABITAT:** Riverine tidal flats, small areas of Palustrine forested wetlands, strands of wild rice.

**THREATENED/ENDANGERED:** Osprey and eagles – winter and summer. Wild rice.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Between Croydon, PA, to the west and Bristol, PA to the east, north of Burlington, NJ, the Burlington/Bristol bridge passes over this segment of shoreline. The shoreline consists of riverine tidal gravel flats, also within this area is the mouth of Otter Creek and its embayment which consist of tidal mud flats, with aquatic vegetation.

##### 2. SHORELINE TYPES

Gravel beaches / riprap; exposed tidal flats; and sheltered tidal flats.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.). Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shoreline consists of riverine tidal gravel flats, also within this area is the mouth of Otter Creek and its embayment which consists of tidal mud flats, with aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** Shortnose sturgeon, banded sunfish, striped bass, indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Tidal gravel flats covering 2.4 miles of shoreline.

##### 2. SHORELINE TYPES

Gravel beaches/riprap, exposed tidal flats.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shoreline consists of riverine gravel flats with rooted aquatic vegetation. (spatterdock)

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

The shoreline consists of bulkheads.

##### 2. SHORELINE TYPES

Man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** These areas provide cover for smaller species of fish and may also serve as nursery waters.

**HABITAT:** Fish use these waters for cover, and as nursery waters.

**THREATENED/ENDANGERED:** Fish utilizing these areas include species of concern according to the PNDI sys in PA. These include shortnose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### ASSISCUNK CREEK (QUADRANGLE NUMBER – NJ-8)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Fine sand beaches, Gravel beaches/riprap, marshes.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### 3. RESOURCES AT RISK

**WILDLIFE:** Assiscunk Creeks wetlands are likely to support both migrant and nesting waterfowl, wading birds, and many species that are characteristic of a freshwater wetland community. Various species of anadromous, estuarine, and freshwater fish are likely to occur in the creek, along with muskrat and river otter.

**HABITAT:** Highly sensitive: Plustrine seasonally tidal emergent wetlands, Palustrine scrub-shrub wetlands, Palustrine emergent wetlands, plustrine emergent wetlands, and Palustrine forested wetland.

**THREATENED/ENDANGERED:** Transient use to be expected.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Area consist of boat dock, ramps, marinas, and anchorages for pleasure craft.

##### 2. SHORELINE TYPES

Sand and gravel beaches, gravel beaches/riprap, man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary steams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shoreline consists of boat dock, ramps, marinas, and anchorages for pleasure craft.

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

The shoreline consists of a riverine tidal gravel flat. Total shoreline coverage is .8 miles.

##### 2. SHORELINE TYPES

Gravel beaches/riprap, exposed tidal flats, man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary steams and shorelines with rooted aquatic



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shoreline consists of a riverine tidal gravel flat.

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

The mouth of Martians Creek is actually an embayment with a marina.

##### 2. SHORELINE TYPES

Gravel beaches/riprap, sheltered tidal flats, man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The area along the river outside of the embayment is tidal gravel flats with aquatic vegetation, (spatterdock), while inside the embayment it is tidal mud flats with aquatic vegetation (spatterdock)

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Steel bulkheads, embayment, and riprap..

##### 2. SHORELINE TYPES

Gravel beaches/riprap, man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** These areas provide cover for smaller species of fish and may also serve as nursery waters for estuarine or anadromous fish.

**HABITAT:** The shoreline consists of bulkheads and also contains an embayment.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

**THREATENED/ENDANGERED:** Fish utilizing these areas include species of concern according to the PNDI sys. These include short nose sturgeon, banded sunfish, striped bass.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Tidal mudflats covering .8 miles of shoreline.

##### 2. SHORELINE TYPES

Exposed tidal flats, man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shore line consists of riverine mudflats with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Gravel beaches/riprap.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** The shore line consists of riverine tidal gravel flat and includes a site of historical significance.

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Riverine tidal gravel flat with rooted aquatic vegetation. Covering approximately .8 miles of shoreline.

##### 2. SHORELINE TYPES

Gravel beaches/riprap.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Sensitive shoreline consists of riverine tidal gravel flat with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Riverine tidal gravel flat with rooted aquatic vegetation. Covering approximately 4/10 of a mile of shoreline.

##### 2. SHORELINE TYPES

Gravel beaches/riprap.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Sensitive shoreline consists of riverine tidal gravel flat with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

Tidal gravel flats, and a bulk oil facility with pier, dock casons, and riprap.

##### 2. SHORELINE TYPES

Gravel beaches/riprap, exposed tidal flats, sheltered tidal flats, man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary steams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Sensitive shoreline consists of riverine tidal gravel flat with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### BILES CREEK, PA. (QUADRANGLE NUMBER – NJ-10)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

None listed.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary steams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Sensitive shoreline consists of riverine tidal gravel flat with rooted aquatic vegetation (spatterdock). The mouth of Biles Creek (at the south end of Biles Island) is also a tidal gravel flat with rooted aquatic vegetation.

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### CROSSWICKS CREEK (QUADRANGLE NUMBER – NJ-10)

##### 1. PHYSICAL DESCRIPTION

Fresh water tidal marsh, Palustrine emergent wetland, scrub-shrub wetland, and forested wetland.

##### 2. SHORELINE TYPES

Fine sand beaches, marshes, man-made structures.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Tidal creeks support shad and yellow perch. Both migrant and nesting waterfowl, wading birds, mergansers, cormorants, osprey, least terns, Virginia rail, sore common moorhen and marsh wren are all known to occur in the Trenton Marshes which include this site.

**HABITAT:** Highly sensitive wetlands occur along Duck Creek which is also adjacent to the Delaware and Raritan Canal State park. These wetlands are a part of the Trenton Marshes, which are the northern most tidal wetlands on the Delaware River. On NJ list of Rare Community.

**THREATENED/ENDANGERED:** Large stands of Wild Rice occur here in the area, bald eagle, American bittern, king rail, and pied-billed grebe, plus several species of rare, threatened, or endangered plants.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

##### 2. SHORELINE TYPES

Gravel beaches/riprap, exposed tidal flats.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Sensitive shoreline consists of riverine tidal gravel flat with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Exposed tidal flats, marshes.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Sensitive shoreline consists of riverine tidal gravel flat with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.

#### DELAWARE RIVER, PA (QUADRANGLE NUMBER – NONE AVAILABLE)

##### 1. PHYSICAL DESCRIPTION

None listed.

##### 2. SHORELINE TYPES

Gravel beaches/riprap.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Resident populations of Canada geese, various ducks, and wading birds (egrets, great blue heron, etc.) Tidal portions of tributary streams and shorelines with rooted aquatic vegetation are utilized as feeding/nesting areas for waterfowl, and wading birds. These areas are also utilized as nursery waters, spawning, feeding grounds for estuarine and anadromous fish.

**HABITAT:** Sensitive shoreline consists of riverine tidal gravel flat with rooted aquatic vegetation (spatterdock).

**THREATENED/ENDANGERED:** A cursory review of the PNDI sys. Shows numerous plants, animals, and habitats of concern in PA. These include short nose sturgeon, banded sunfish, striped bass, Indian wild rice, etc.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### DUCK CREEK (QUADRANGLE NUMBER – NJ-10)

##### 1. PHYSICAL DESCRIPTION

Fresh water tidal marsh, Palustrine emergent wetland, scrub-shrub wetland, and forested wetland.

##### 2. SHORELINE TYPES

Fine sand beaches, gravel beaches/riprap, marshes.

##### 3. RESOURCES AT RISK

**WILDLIFE:** Tidal creeks support shad and yellow perch. Both migrant and nesting waterfowl, wading birds, mergansers, cormorants, osprey, least terns, Virginia rail, more common moorhen and marsh wren are all known to occur in the Trenton Marshes which include this site.

**HABITAT:** Highly sensitive wetlands occur along Duck Creek which is also adjacent to the Delaware and Raritan Canal State park. These wetlands are a part of the Trenton Marshes, which are the northern most tidal wetlands on the Delaware River. On NJ list of Rare Community.

**THREATENED/ENDANGERED:** Large stands of Wild Rice occur here in the area, bald eagle, American bittern, king rail, and pied-billed grebe, plus several species of rare, threatened, or endangered plants.

#### NEWBOLD ISLAND, NJ. (QUADRANGLE NUMBER – NJ-10)

##### 1. PHYSICAL DESCRIPTION

A low flat island surrounded by mud flats, accessible by shallow draft boats only.

##### 2. SHORELINE TYPES

Exposed tidal flats, sheltered tidal flats, marshes.

##### 3. RESOURCES AT RISK

**WILDLIFE:** The wetlands that occur on Newbold Island are likely to support both migrant and nesting waterfowl, wading birds, and many species that are characteristic of a freshwater wetland community. Various species of anadromous, estuarine, and freshwater fish are also very likely to occur along Newbold Island. Some used by river otter and muskrats.

**HABITAT:** Highly sensitive wetlands on Newbold Island. Riverine tidal flats, riverine tidal emergent wetlands, palustrine emergent wetlands, palustrine scrub-shrub wetlands, and palustrine forested wetlands.

**THREATENED/ENDANGERED:** Great blue heron feeding site.



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### VIRGINIA

The following information is identified by the Environmental Protection Agency for Region 3.

**Colonial Pipeline Points: Remington Station, Locust Grove Station, James River Station, Mitchell Junction (Breakout Tankage) and Mitchell Junction (Booster Station & Delivery)**

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
<u>DWARF WEDGE MUSSEL</u>	<u>VA-24</u>

**Colonial Pipeline Points: Mitchell Junction, Buckingham Junction, Lynchburg Junction, Forest Junction, and Roanoke DF**

EPA WATER INTAKE	
<u>WATER INTAKE NAME</u>	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	
EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
<u>SMALL WHORLED POGONIA</u>	<u>RO-5</u>



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

Colonial Pipeline Points: Mitchell Junction, Powhatan Station, Richmond DF, Ruffin DF, Maury DF, Yorktown Junction, Amoco DF, Yorktown DF, West Branch DF, Surry DF, Craney Island DF, Craney Island Junction, Norfolk DF, Hill DF, S. Norfolk DF

EPA WATER INTAKE	
WATER INTAKE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	

Colonial Pipeline Points: Remington Station, Locust Grove Station, James River Station, Mitchell Junction (Breakout Tankage) and Mitchell Junction (Booster Station & Delivery)

### VIRGINIA SENSITIVE AREAS

EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
DWARF WEDGE MUSSEL	VA-24







**Colonial Pipeline Company**  
**ENVIRONMENTALLY SENSITIVE AREAS**

Northeast District

EPA WATER INTAKE	
WATER INTAKE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	



**Colonial Pipeline Company**  
**ENVIRONMENTALLY SENSITIVE AREAS**

Northeast District

EPA WATER INTAKE	
WATER INTAKE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	



**Colonial Pipeline Company**  
**ENVIRONMENTALLY SENSITIVE AREAS**

**Northeast District**

(b) (7)(F), (b) (3)





# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

**Colonial Pipeline Points:** Mitchell Junction, Willis Mtn. Station, Hancock Station, Hickory Grove Station, and Witt Station

### VIRGINIA SENSITIVE AREAS

EPA WATER INTAKE	
WATER INTAKE NAME	QUADRANGLE NUMBER
(b) (7)(F), (b) (3)	
EPA SENSITIVE AREA	
SENSITIVE AREA NAME	QUADRANGLE NUMBER
HOLIDAY LAKE STATE PARK	VA-13A
BEAR CREEK LAKE STATE PARK	VA-18

Additional agency resources to identify environmental and economic sensitive areas can be found in the table below:



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

#### Emergency Response Resource Websites

Resource	Contents	Document Link/Navigation Instructions
<b>EPA</b>		-
LEPC Database	EPA's list of LEPC sorted by state and county/municipality	<a href="http://yosemite.epa.gov/oswer/LEPCDb.nsf/ByState!OpenView&amp;Start=1&amp;Expand=45#45">http://yosemite.epa.gov/oswer/LEPCDb.nsf/ByState!OpenView&amp;Start=1&amp;Expand=45#45</a>
EJMapper	Interactive map of facilities that report to EPA (including NPDES Permit holders), waterbodies, governmental jurisdictions, demographics (populations, economics, etc.), land cover, etc.	<a href="http://www.epa.gov/environmentaljustice/mapping.html">http://www.epa.gov/environmentaljustice/mapping.html</a>
EPA OSC Website	EPA's clearinghouse of useful information for On-Scene Coordinators (H&S information, Equipment and Supply Vendors, Training Providers, etc.)	<a href="http://www.epaosc.org/default.aspx">http://www.epaosc.org/default.aspx</a>
EPA NEPAAssist Website	Interactive map of facilities that report to EPA (including NPDES Permit holders), waterbodies, governmental jurisdictions, demographics (populations, economics, etc.), land cover, etc.	<a href="http://134.67.99.123/nepassist/entry.aspx">http://134.67.99.123/nepassist/entry.aspx</a>
<b>FEMA</b>		-
NIMS Resource Center	FEMA's NIMS information clearinghouse that includes guidance documents, training materials and related resources	<a href="http://www.fema.gov/emergency/nims/index.shtm">http://www.fema.gov/emergency/nims/index.shtm</a>
<b>NOAA</b>		-
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	<a href="http://response.restoration.noaa.gov/oil-and-chemical-spills/chemical-spills/response-tools/guide-responder-tools.html">http://response.restoration.noaa.gov/oil-and-chemical-spills/chemical-spills/response-tools/guide-responder-tools.html</a>
		-



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

### Northeast District

<b>OSHA</b>		-
Oil Spill Response Worker Protection Website	OSHA requirements and guidance for ensuring the protection of oil spill cleanup activities	<a href="http://www.osha.gov/oilspills/index.html">http://www.osha.gov/oilspills/index.html</a>
Incident Command System eTool Website	OSHA's ICS information clearinghouse that includes guidance documents, training materials and related resources	<a href="http://www.osha.gov/SLTC/etools/ics/index.html">http://www.osha.gov/SLTC/etools/ics/index.html</a>
<b>PHMSA</b>		-
National Pipeline Mapping System	PHMSA's Pipeline Information Management Mapping Application (PIMMA). Persons must apply to PHMSA for access to Interactive Map	<a href="https://www.npms.phmsa.dot.gov/">https://www.npms.phmsa.dot.gov/</a>
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	<a href="https://www.npms.phmsa.dot.gov/application.asp?tact=Data&amp;page=subapp.asp?app=data&amp;act=data_req">https://www.npms.phmsa.dot.gov/application.asp?tact=Data&amp;page=subapp.asp?app=data&amp;act=data_req</a>
<b>Regional Response Teams</b>		-
Regional Response Team Website Links	Link to the 13 Regional Response Team Websites; which often include information such as the Regional/Geographic Response Plans	<a href="http://www.rrt.nrt.org/">http://www.rrt.nrt.org/</a>
<b>The Response Group (TRG)</b>		-
TRG IAP Software Log In Screen	First Login User ID: iapcolonial Password: 07pipel!ne Second Login User ID: planning Password: planning	<a href="http://www.iapsoftware.com/">http://www.iapsoftware.com/</a>



# Colonial Pipeline Company

## ENVIRONMENTALLY SENSITIVE AREAS

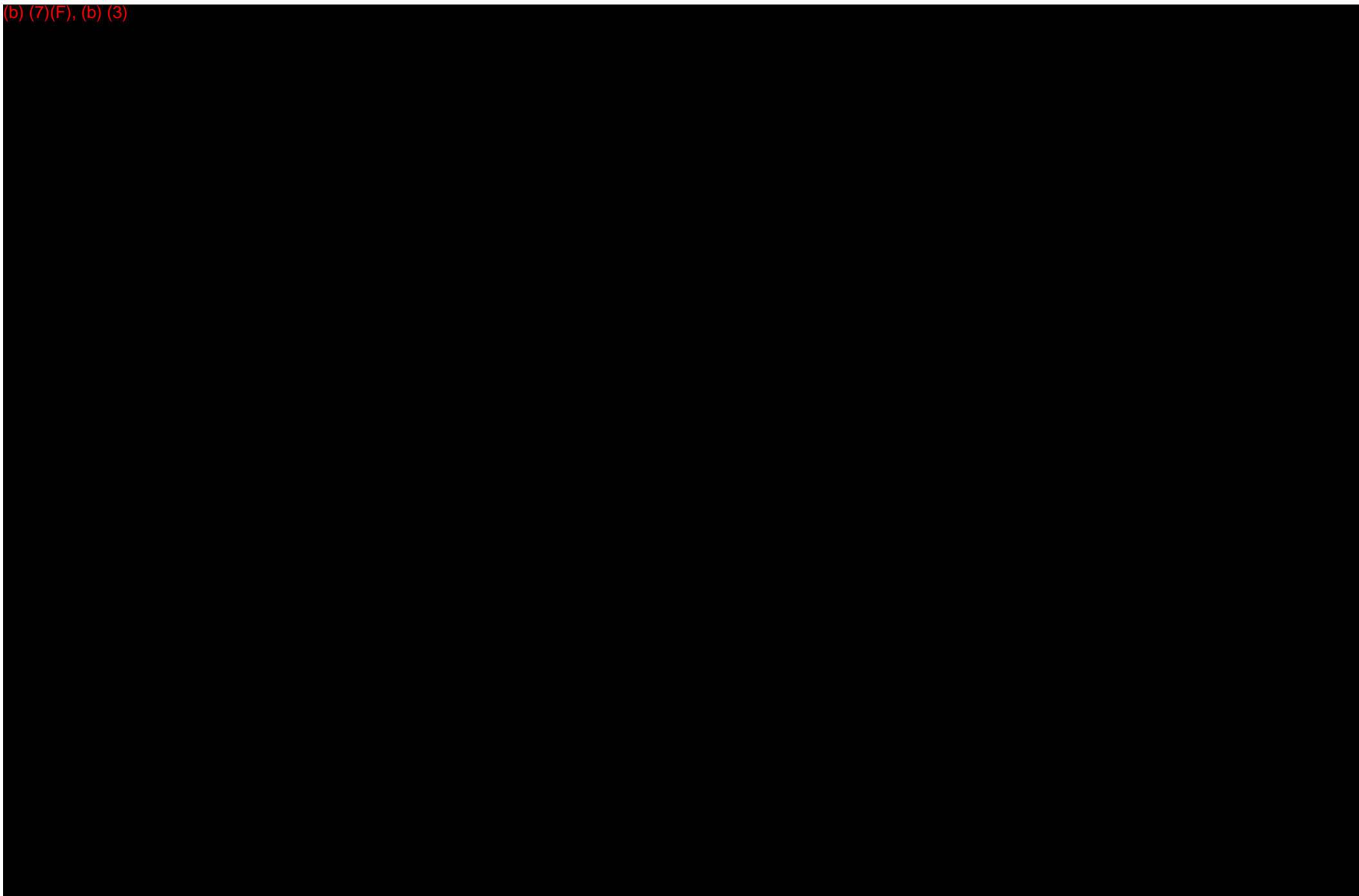
### Northeast District

<b>USGS</b>		-
USCG Homeport	Homepage that provides links to all USCG Ports/Sectors and public-access versions of the Area Contingency Plans	<a href="https://homeport.uscg.mil/mycg/portal/ep/home.do">https://homeport.uscg.mil/mycg/portal/ep/home.do</a>
<b>USDA</b>		
Web Soil Survey	Interactive Map and downloadable GIS data that provide information about soil characteristics	<a href="http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm">http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm</a>
<b>USFWS</b>		
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	<a href="http://criticalhabitat.fws.gov/crithab/">http://criticalhabitat.fws.gov/crithab/</a>
National Wetlands Inventory	Interactive Map and downloadable GIS data that identifies areas that are designated as wetlands by the USFWS	<a href="http://www.fws.gov/wetlands/data/">http://www.fws.gov/wetlands/data/</a>
<b>USGS</b>		
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.	<a href="http://waterdata.usgs.gov/nwis/sw">http://waterdata.usgs.gov/nwis/sw</a>
USGS Watershed Data for Google Earth	Downloadable Google Earth Watershed/Water Feature overlay maps for the United States	<a href="http://edna.usgs.gov/watersheds/kml_index.htm">http://edna.usgs.gov/watersheds/kml_index.htm</a>
<b>Juice Analytics for Google Earth</b>		
Census Data	Census Data/Population Density for Google Earth by county or block in each state	<a href="http://www.juiceanalytics.com/writing/census-data-in-google-earth/">http://www.juiceanalytics.com/writing/census-data-in-google-earth/</a>
<b>US Census Bureau</b>		
Census Data	Census Data/Population Density	<a href="http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml">http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml</a>



**Colonial Pipeline Company**  
**WATER INTAKE LOCATIONS - RESPONSE ZONE 803**  
**Northeast District**

(b) (7)(F), (b) (3)





**Colonial Pipeline Company**  
**WATER INTAKE LOCATIONS - RESPONSE ZONE 803**  
**Northeast District**

(b) (7)(F), (b) (3)





**Colonial Pipeline Company**  
**WATER INTAKE LOCATIONS - RESPONSE ZONE 803**  
**Northeast District**

(b) (7)(F), (b) (3)





**Colonial Pipeline Company**  
**WATER INTAKE LOCATIONS - RESPONSE ZONE 803**  
**Northeast District**

(b) (7)(F), (b) (3)





**Colonial Pipeline Company**  
**WATER INTAKE LOCATIONS - RESPONSE ZONE 803**  
**Northeast District**