Failure Investigation Report – Buckeye Tank 701 Line Failure – Activity ID 128252

Principal Investigator	Chris D'Souza
Regional Director	Byron Coy
Date of Report	03/14/2011
Subject	Failure Investigation Report – Buckeye Tank 701 Line Failure

Summary:

On December 30, 2009 @ 22:40 hrs Buckeye called the NRC to report a gasoline leak from a line connected to Storage Tank 701 (Appendix 4 – NRC Report 927442). Residents from Clear View Lane numbers 2250 and 2290 reported odors in their homes on December 29, 2009 @ 21:12 hrs. This was initially reported on NRC# 927364 (Appendix 3).

Residents from four homes on Clear View Lane were evacuated by the Fire Department as a precautionary measure. The odors were emanating from the sewer line in those homes and from sewer vents on the street.

The location of the leak on the pipe was below grade on the underside of the single pipe connection to and from Tank # 701, below a valve manifold along the inside of Buckeye's fence line on Cherry Road (Appendix 1 - Map). The leak in the pipe occurred as a result of external corrosion. Gasoline product migrated below grade to the outside of the property fence line where it entered a breach in a nearby sewage line on Cherry Tree Road.

After the discovery of the leak, the tank line was drained, the coating peeled back and the integrity of the pipe was good enough to install a temporary "Plidco" sleeve. The line was pressure tested to 128 psig on January 1, 2010, and did not leak. After the pressure test, product transfer resumed, using the temporarily repaired line, for approximately 6 hrs without additional leaks.

A trench, approximately 5 feet deep was dug between the repaired line and fence line to mitigate product plume migration. Three monitoring wells (PZ1/ PZ2 / PZ3), 15 feet deep were installed along the line directly between the failed line and fence line to monitor product. Initial product depth in PZ2 & PZ3 was about 2ft in the wells. PZ1 showed no product. The water table is approximately 8-10 feet. Additional monitoring wells are planned to delineate product plume. One monitoring hole was dug up on the residential side of Cherry Tree Road to check for any product – no product was found and the hole was filled. Approximately 386 barrels of gasoline was spilled. Fifty-two barrels were recovered. (Appendix 5 - Photos)

Operator, Location, & Consequences

Date & Time of Failure:	12/29/2009 22:00
Commodity Released:	Gasoline
City/County & State:	Aston, Delaware County, PA, 19014
OpID & Operator Name	1845 Buckeye
Unit # & Unit Name	20171 Booth
SMART Activity #:	128252
Milepost / Location	Latitude: 39.8652
	Longitude: -75.452042
Type of Failure:	Pipe leak
Fatalities:	0
Injuries	0
Description of area impacted	Urban - Buckeye Chelsea Aston Tank Farm Property and nearby residential area
Property damage / Total Costs	$2,953,327

System Details

Chelsea Tank Farm - 12 Breakout tanks and associated piping

Events Leading up to the Failure

Buckeye Partners' (Buckeye) control center in Breinigsville, PA received a call from the Aston, PA Fire Marshall reporting gasoline odors in the area of Clearview Lane in Aston, PA (Appendix 1 - Map). Buckeye's 8" pipeline in the area (CT553JP) had been shut down earlier in the day as part of a normal, scheduled shut down and the pipeline pressure was being monitored. A detailed timeline of events can be found in Appendix 6 of this report.

Emergency Response

After notification from Buckeye's control center, field personnel arrived at the site and confirmed the presence of gasoline odors. A representative of the Pennsylvania Department of Environmental Protection (PADEP) measured gas odors in several adjacent sanitary sewer manholes as well as a few nearby residences. The fire department requested the evacuation of four residences as a precaution until the vapor levels subsided.

A unified command was established by Buckeye's local operations manager. Buckeye personnel proceeded to walk the pipeline right of way and although no visible product was seen, they did detect an odor in some areas. Buckeye decided to walk the pipeline right of way again during daylight hours and to dig test holes in the areas of high vapor levels. Buckeye had a total of ten locations probed between Cherry Tree Street and Overlook Street with no product found. The test holes dug on Arbor Lane were also found to be clean of product. The PADEP representative indicated that it appeared that the problem was in the vicinity of Scott Lane because the sewer manholes on Cherry Tree Street and Frazer Street had high vapor levels. Buckeye decided to excavate the gasoline tank lines inside the adjacent Chelsea station since these pipelines were closer to Scott Street. Buckeye personnel identified high vapor levels and visible product in the excavation at the tank junction valves in Chelsea station. The release was determined to be on the tank 701 line. Buckeye installed a Plidco sleeve, which stopped the release.

Summary of initial start-up plan and return-to-service, including preliminary safety measures

A temporary "Plidco" sleeve was installed on the line. The line was pressure tested to 128 psig on January 1, 2010, and did not leak. After the pressure test, product transfer resumed, using the temporarily repaired line, for approximately 6 hrs without additional leaks. An accident report was submitted by Buckeye pertaining to this event (Appendix 2). Permanent repairs were completed on February 12, 2010 by cutting out the damaged pipe and replacing it with certified pipe. The damaged pipe was sent to a laboratory for metallurgical analysis. The analysis revealed the cause of the external corrosion to be microbiological induced corrosion. Remediation is still on-going. Operation of the facility was turned over to Conoco Phillips on March 1, 2011. Additional follow-up on the contributing factors for this accident will be identified and managed by Conoco Phillips.

Investigation Findings & Contributing Factors

The cause has been determined to be external microbiological induced corrosion. The corrosion appears to be limited to the section of piping where the failure occurred.

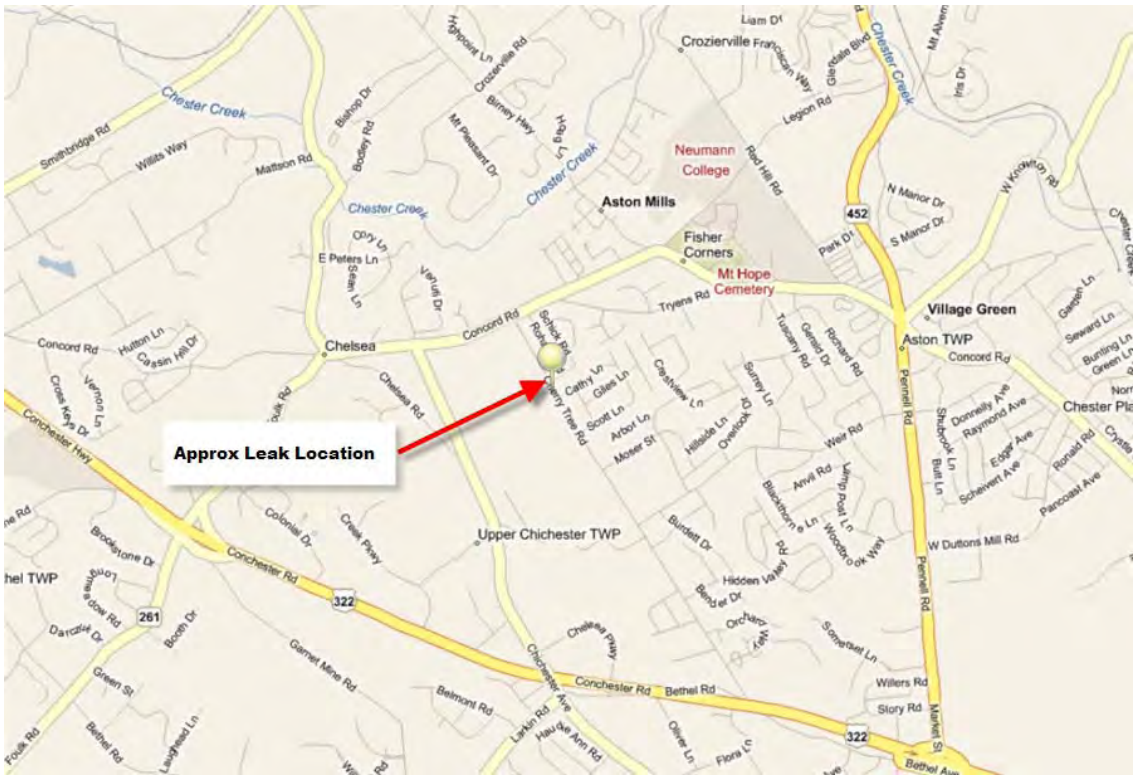
Appendices

1	Map
2	Accident Report 20090367 - 13086
3	NRC Report 927364
4	NRC Report 927442
5	Photos
6	Accident Report 20090367 Timeline of Events


Delaware
Westtown
Cheyney
Glen Mills
Lima
Upper Providence Township
Springfield
Media
Hill
Lansdowne
Clifton Heights
Aldan
Collingdale
Pocopson
Thornton
Chester Heights
Concordville
Nether Providence Township
Swarthmore
Morton
Holmes
Folsom
Glenolden
Chester County
Delaware County
Wallingford
Woodlyn
Norwood
Prospect Park
Village Green
Brookhaven
Crum Lynne
Ridley Park
Upland
Chester
Chester Township
Boothwyn
PENNSYLVANIA
DELAWARE
NEW JERSEY
Linwood
Talleyville
Winterthur
Rockland
Claymont
Bridgeport
Leak Location
Greenville
Bellefonte
2.2mi
ESRI
Position 39°51'56"N 75°26'14"W
Copyright:© 2010 ESRI, DeLorme, AND, Tele Atlas, UNEP-WCMC


Leak Location
Philadelphia
Chester
Wilmington
Springfield
Media
Marple
Upper Darby
Drexel Hill
Lansdowne
Ridley Creek State Park
Brookhaven
Boothwyn
Linwood
Claymont
Bridgeport
Marcus Hook
Trainer
Essington
Mobil Refinery
Paulsboro
Gibbstown
Clarksboro
Mullica Hill
Swedesboro
Penns Grove
Carneys Point
Delaware
Chadds Ford
Kennett Square
Kennett Pike
Concord Pike
Naval Business Center
National Park
Boeing
Sun Oil
Gulf Oil
ESRI

128252 Appendix 1 Map




Tank 701 - Gasoline Tank feeding leaking line
Approx Leak Location
Home affected by leak
Concord Rd
Schick Rd
Snyder Ln
Hunters Run
E Evans Way
Cisco Ln
Aston TWP
Rohach Rd
Cathy Ln
Jennifer Ln
Frazer Ln
Giles Ln
Gettysburg Dr
Scott Ln
Clearview Ln
Connie Ln
Cherry Tree Rd
Arbor Ln

U.S Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS

Report format corresponds to Form PHMSA F 7000-1 (01-2001)

Report Date January 27, 2010

No. 20090367 - 13086

PART A – GENERAL INFORMATION					
N	Original Report	Y	Supplemental Report	N	Final Report

1. Operator Name and Address		
a. Operator's 5-digit Identification Number		1845
b. If Operator does not own the pipeline, enter Owner's OPS 5-digit Identification Number (if known)		
c. Name of Operator		BUCKEYE PARTNERS, LP
d. Operator street address		P.O. BOX 368
e. Operator address	City	EMMAUS
	County or Parish	LEHIGH
	State	PA
	Zip code	18049
2. Time and date of the accident		
	Hour	22:00
	Date of the accident	12/29/2009
3. Location of accident		
a. Latitude		39.86
Longitude		-75.45
b. City		ASTON
County or Parish		DELAWARE
c. State		PA
Zip Code		19014
d. Mile Post/Valve Station		0
Survey Station No		0
4. Telephone Report		
NRC Report Number		927443
Date		12/30/09
5. Losses (Estimated)		
Public/Community Losses reimbursed by operator		
Public/private property damage	$	250,381
Cost of emergency response phase	$	195,243
Cost of environmental remediation	$	2,140,000
Other Costs	$	0
Describe		
Operator Losses		
Value of product lost	$	28,283
Value of operator property damage	$	63,620
Other Costs	$	275,800
Describe		REPAIRS
Total Costs	$	2,953,327
6. Commodity Spilled		
Commodity spilled (yes/no)		Y
a. Name of commodity spilled		GASOLINE
b. Classification of commodity spilled		GASOLINE, DIESEL, FUEL OIL OR OTHER PETROLEUM PRODUCT WHICH IS A LIQUID AT AMBIENT CONDITIONS
c. Estimated amount of commodity involved		
Unit of Measure		BARRELS
Amount Spilled		386.00
Amount Recovered		52.00
CAUSES FOR SMALL SPILLS		NO DATA
PART B – PREPARER AND AUTHORIZED SIGNATURE		
Preparer's Name		BRAD YARZEBINSKI

Area Code and Telephone Number		6109044958	
Preparer's E-mail Address		BYARZEBINSKI@BUCKEYE.COM	
Area Code and Facsimile Number		6109044545	
PART C – ORIGIN OF THE ACCIDENT			
1. Additional location information			
a. Line segment name or ID		CT	
b. Accident on Federal Land other than Outer Continental Shelf		NO	
c. Is pipeline Interstate		Y	
Offshore		N	
d. Area			
Block #			
State			
Outer Continental Shelf		N	
2. Location of system involved			
Operator's Property		YES	
Pipeline Right of Way		N	
High Consequence Area (HCA)		Y	
Describe HCA		HIGH POPULATION	
3. Part of system involved in accident		PUMP/METER STATION	
Other (specify)			
If failure occurred on Pipeline, complete items a-g			
a. Leak or Rupture			
Type of Leak			
- Puncture, diameter *(inches)*			
Type of Rupture			
- Tear/Crack, length *(inches)*			
- Propagation Length, total, both sides *(feet)*			
Other (specify)			
b. Type of block valve used for isolation immediate section			
Upstream			
Manual		NO	
Automatic		NO	
Remote Control		NO	
Check Valve		NO	
Downstream			
Manual		NO	
Automatic		NO	
Remote Control		NO	
Check Valve		NO	
c. Length of segment isolated (ft)			
d. Distance between valves (ft)			
e. Is segment configured for internal inspection tools?			
f. Had there been an in-line inspection device run at the point of failure?			
g. If Yes, type of device run			
High Resolution Magnetic Flux tool	NO	Year run	
Low Resolution Magnetic Flux tool	NO	Year run	
UT tool	NO	Year run	
Geometry tool	NO	Year run	
Caliper tool	NO	Year run	
Crack tool	NO	Year run	
Hard Spot tool	NO	Year run	
Other tool	NO	Year run	
4. Failure occurred on		BODY OF PIPE	
Other (specify)			
Year the component that failed was installed		1947	
5. Maximum operating pressure (MOP)			
a. Estimated pressure at point and time of		40	

accident (PSIG)		
b. MOP at time of accident (PSIG)		305.00
c. Did an over pressurization occur relating to the accident?		N
PART D – MATERIAL SPECIFICATION		
1. Nominal pipe size (NPS) (inches)		12
2. Wall thickness (inches)		.3
3. Specification		API 5L GRADE B
SMYS		35000
4. Seam type		SEAMLESS
5. Valve type		
6. Manufactured by		
in year		
PART E - ENVIRONMENT		
1. Area of accident		UNDER GROUND
Other (specify)		
2. Depth of cover (inches)		72
PART F - CONSEQUENCES		
1. Consequences	**Fatalities**	**Injuries**
a. Number of operator employees	0	0
Contractor employees working for operator	0	0
General public	0	0
Totals	0	0
b. Was pipeline/segment shutdown due to leak?	Y	
If Yes, how long? Days	1	
Hours	18	
Minutes	0	
c. Product ignited	Gas did not Ignite	
d. Explosion	NO EXPLOSION	
e. Evacuation *(general public only)*	Y	
Number of people	10	
Reason for Evacuation	EVACUATION REQUIRED OR INITIATED BY PUBLIC OFFICIAL	
f. Elapsed time until area was made safe		
Hours	35	
Minutes	15	
2. Environmental Impact		
a. Wildlife Impact		
Fish/aquatic	N	
Birds	N	
Terrestrial	N	
b. Soil Contamination	Y	
If Yes, estimated number of cubic yards	250	
c. Long term impact assessment performed	Y	
d. Anticipated remediation	Y	
If Yes, check all that apply		
Surface Water	N	
Groundwater	Y	
Soil	Y	
Vegetation	N	
Wildlife	N	
e. Water Contamination	Y	
Amount in water (barrels)	.1	
Ocean/Seawater		
Surface		
Groundwater	Y	
Drinking water	Y	
Drinking water source	PRIVATE WELL	
PART G – LEAK DETECTION INFORMATION		
1. Computer based leak detection capability in place?	N	
2. Was the release initially detected by?	A THIRD PARTY	
Other (specify)		

3. Estimated leak duration Days	1
Hours	4
PART H – APPARENT CAUSE	
H1 – CORROSION	
1. External Corrosion	Yes
2. Internal Corrosion	
Complete items a-e where applicable	
a. Pipe Coating	COATED
b. Visual Examination	LOCALIZED PITTING
Other (specify)	
c. Cause of Corrosion	MICROBIOLOGICAL
Other (specify)	
d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?	Y
Year Protection Started	1967
e. Was pipe previously damaged in the area of corrosion?	N
Estimated time prior to accident Years	
Months	
H2 – NATURAL FORCES	
3. Earth Movement	
Description	
Other (specify)	
4. Lightning	
5. Heavy Rains/Floods	
Description	
Other (specify)	
6. Temperature	
Description	
Other (specify)	
7. High Winds	
H3 – EXCAVATION DAMAGE	
8. Operator Excavation Damage (including their contractors / Not Third Party)	
9. Third Party	
a. Excavator group	
b. Type	
Other (specify)	
c. Excavation was	
d. Excavation was ongoing activity (Month or longer)	
If Yes, Date of last contact	
e. Did operator get prior notification of excavation activity?	
If Yes; Date received	null
Notification received from	
f. Was pipeline marked?	
i. Temporary markings	
ii. Permanent markings	
iii. Marks were	
iv. Were marks made within required time?	
H4 – OTHER OUTSIDE FORCE DAMAGE	
10. Fire/Explosion as primary cause of failure	
Fire/Explosion cause	
11. Car, truck or other vehicle not relating to excavation activity damaging pipe	
12. Rupture of Previously Damaged Pipe	
13. Vandalism	
H5 – MATERIAL AND/OR WELD FAILURES	
Material	
14. Body of Pipe	
Description	

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

PART I – NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT

ON DECEMBER 29, 2009 AT 10:00 P.M., BUCKEYE PARTNERS' (BUCKEYE) CONTROL CENTER IN BREINIGSVILLE, PA RECEIVED A CALL FROM THE ASTON, PA FIRE MARSHALL REPORTING GASOLINE ODORS IN THE AREA OF CLEARVIEW LANE IN ASTON, PA. BUCKEYE'S 8" PIPELINE IN THE AREA (CT553JP) HAD BEEN SHUT DOWN EARLIER IN THE DAY AS PART OF A NORMAL,

SCHEDULED SHUT DOWN AND THE PIPELINE PRESSURE WAS BEING MONITORED. AFTER NOTIFICATION FROM BUCKEYE'S CONTROL CENTER, FIELD PERSONNEL ARRIVED AT THE SITE AND CONFIRMED THE PRESENCE OF GASOLINE ODORS. AT 12:45 A.M. ON DECEMBER 30, 2009, A REPRESENTATIVE OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) MEASURED GAS ODORS IN SEVERAL ADJACENT SANITARY SEWER MANHOLES AS WELL AS A FEW NEARBY RESIDENCES. THE FIRE DEPARTMENT REQUESTED THE EVACUATION OF FOUR RESIDENCES AS A PRECAUTION UNTIL THE VAPOR LEVELS SUBSIDED. AT 1:40 A.M. ON DECEMBER 30, 2009 A UNIFIED COMMAND WAS ESTABLISHED BY BUCKEYE'S LOCAL OPERATIONS MANAGER. BUCKEYE PERSONNEL PROCEEDED TO WALK THE PIPELINE RIGHT OF WAY AND ALTHOUGH NO VISIBLE PRODUCT WAS SEEN, THEY DID DETECT AN ODOR IN SOME AREAS. BUCKEYE DECIDED TO WALK THE PIPELINE RIGHT OF WAY AGAIN DURING DAYLIGHT HOURS AND TO DIG TEST HOLES IN THE AREAS OF HIGH VAPOR LEVELS. BY NOON ON DECEMBER 30, 2009, BUCKEYE HAD A TOTAL OF TEN LOCATIONS PROBED BETWEEN CHERRY TREE STREET AND OVERLOOK STREET WITH NO PRODUCT FOUND. THE TEST HOLES DUG ON ARBOR LANE WERE ALSO FOUND TO BE CLEAN OF PRODUCT. AT 12:28 P.M. ON DECEMBER 30, 2009, THE PADEP REPRESENTATIVE INDICATED THAT IT APPEARED THAT THE PROBLEM WAS IN THE VICINITY OF SCOTT LANE BECAUSE THE SEWER MANHOLES ON CHERRY TREE STREET AND FRAZER STREET HAD HIGH VAPOR LEVELS. BUCKEYE DECIDED TO EXCAVATE THE GASOLINE TANK LINES INSIDE THE ADJACENT CHELSEA STATION SINCE THESE PIPELINES WERE CLOSER TO SCOTT STREET. AT 10:00 P.M. ON DECEMBER 30, 2009 BUCKEYE PERSONNEL IDENTIFIED HIGH VAPOR LEVELS AND VISIBLE PRODUCT IN THE EXCAVATION AT THE TANK JUNCTION VALVES IN CHELSEA STATION. THE RELEASE WAS DETERMINED TO BE ON THE TANK 701 LINE. AT 1:30 A.M. ON DECEMBER 31, 2009, BUCKEYE INSTALLED A PLIDCO SLEEVE, WHICH STOPPED THE RELEASE. AT NOON ON DECEMBER 31, 2009, ALL RESIDENTS WERE CLEARED TO SAFELY RETURN TO THEIR HOMES. ON JANUARY 1, 2010, THE LOCAL SEWER AUTHORITY CONFIRMED AT LEAST THREE BREACHES IN THE SANITARY SEWER LINE LOCATED UNDER CHERRY TREE STREET. THESE BREACHES ALLOWED GASOLINE FROM THE RELEASE TO GET INTO THE SANITARY SEWER SYSTEM. THE LOCAL SEWER AUTHORITY IS PRESENTLY IN THE PROCESS OF REPAIRING THE SEWER SYSTEM IN THIS AREA. BUCKEYE CONTINUES TO MONITOR THE PLIDCO SLEEVE TWICE DAILY UNTIL PERMANENT REPAIRS CAN BE COMPLETED, WHICH IS SCHEDULED FOR THE WEEK OF FEBRUARY 8, 2010. BUCKEYE HAS DUG NUMEROUS TEST WELLS AND CONTINUES TO WORK ON BOTH THE REMEDIATION OF THE RELEASE AND DETERMINING THE ESTIMATED VOLUME. BUCKEYE NOTIFIED ALL APPROPRIATE OUTSIDE AGENCIES OF THIS INCIDENT. PERMANENT REPAIRS WERE COMPLETED ON FEBRUARY 12, 2010 BY CUTTING OUT THE DAMAGED PIPE AND REPLACING IT WITH CERTIFIED PIPE. THE DAMAGED PIPE HAS BEEN SENT TO A LABORATORY FOR METALLURGICAL ANALYSIS. METALLURGICAL ANALYSIS REVEALED THE CAUSE OF THE EXTERNAL CORROSION TO BE MICROBIOLOGICALLY INDUCED CORROSION. REMEDIATION IS STILL ON-GOING. OPERATION OF THE FACILITY WAS TURNED OVER TO CONOCOPHILLIPS ON 3-1-11.

128252 Appendix 3 NRC report 927364

Pipeline & Hazardous Materials Safety Administration

HMIS->INCIDENTS->TELEPHONICS

(Version 3.4.05 PROD) Rules of Behavior Home Logout Menu

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Rescinded **Comments** (max 250 characters)

NRC Number: 927364
Call Date: 12/30/2009 **Call Time:** 09:05:27

Caller Information

First Name:	BILL	Last Name:	BENNICK
Company Name:	DELAWARE COUNTY 911		
Address:	360 NORTH OLD MIDDLETOWN		
City:	LIMA	State:	PA
Country:	USA	Zip:	19063
Phone 1:	6108928400	Phone 2:	
Organization Type:	LOCAL	Is caller the spiller?	Yes No No Response
Confidential:	Yes No No Response		

Discharger Information

First Name:		Last Name:	UNKNOWN
Company Name:	BUCKEYE PIPELINE		
Address:			
City:		State:	XX
Country:	USA	Zip:	
Phone 1:		Phone 2:	
Organization Type:	UNKNC		

Spill Information

State:	PA	County:	DELAWARE
Nearest City:	ASTON TWP	Zip Code:	

Location

2290 CLEARVIEW LN

Spill Date:	12/29/2009 (mm/dd/yyyy)	Spill Time:	21:12:00 (24hh:mm:ss)
DTG Type:	DISCOVERED		
Incident Type	FIXED FACILITY	Reported Incident Type	FIXED FACILITY

Description

128252 Appendix 3 NRC report 927364

CALLER IS REPORTING A SMELL OF GASOLINE IN A BASEMENT AT A PRIVATE RESIDENCE.
CALLER STATES THAT THEY SUSPECT A LOCAL PIPELINE IS THE SOURCE OF THE ODOR.

Materials Involved

Material / Chris Name	Chris Code	Total Qty.	Water Qty.
UNKNOWN MATERIAL	UNK	0 UNKNOWN AMOUNT	

Medium Type: AIR

Additional Medium Information:

ATMOSPHERE

Injuries: Fatalites:

Evacuations: (•) Yes ( ) No ( ) Unknown No. of Evacuations: 10

Damages: ( ) Yes (•) No ( ) Unknown Damage Amount:

Federal Agency Notified: ( ) Yes ( ) No (•) Unknown State Agency Notified: ( ) Yes ( ) No (•) Unknown

Other Agency Notified: ( ) Yes ( ) No (•) Unknown

Remedial Actions

CALLER STATES THAT THE SOURCE OF THE ODOR IS UNDER INVESTIGATION AND THAT 3 TO 4 HOUSES HAVE BEEN EVACUATED.

Additional Info

NO ADDITIONAL INFORMATION TO REPORT.

Latitude

Degrees: Minutes: Seconds: Quadrant:

Longitude

Degrees: Minutes: Seconds: Quadrant:

Distance from City: Direction:

Section: Township:

Range: Milepost:

128252 Appendix 4 NRC report 927442

Pipeline & Hazardous Materials Safety Administration

HMIS->INCIDENTS->TELEPHONICS

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Rescinded **Comments** (max 250 characters)

NRC Number: **927442**
Call Date: **12/30/2009** **Call Time:** **22:40:50**

Caller Information

First Name:	CARL	Last Name:	OSTACH
Company Name:	BUCKEYE PARTNERS		
Address:	469 MOON CLINTON ROAD		
City:	CORAOPOLIS	State:	PA
Country:	USA	Zip:	15108
Phone 1:	4122929019	Phone 2:	4122997010
Organization Type:	PRIVAT	Is caller the spiller?	Yes No No Response
Confidential:	Yes No No Response		

Discharger Information

First Name:	CARL	Last Name:	OSTACH
Company Name:	BUCKEYE PARTNERS		
Address:	469 MOON CLINTON ROAD		
City:	CORAOPOLIS	State:	PA
Country:	USA	Zip:	15108
Phone 1:	4122929019	Phone 2:	4122997010
Organization Type:	PRIVAT		

Spill Information

State:	PA	County:	DELAWARE
Nearest City:	ASTON	Zip Code:	

Location

920 CHERRY TREE ROAD

Spill Date:	12/29/2009 (mm/dd/yyyy)	Spill Time:	23:00:00 (24hh:mm:ss)
DTG Type:	DISCOVERED		
Incident Type	STORAGE TANKS	Reported Incident Type	STORAGE TANKS

Description

128252 Appendix 4 NRC report 927442

THIS IS A UPDATE TO REPORT # 927432 CALLER IS REPORTING A SPILL OF GASOLINE FROM STORAGE TANK'S LINE DUE TO CORROSION.

Materials Involved

Material / Chris Name	Chris Code	Total Qty.	Water Qty.
GASOLINE: AUTOMOTIVE (UNLEADED)	GAS	0 UNKNOWN AMOUNT	0 UNKNOWN AMOUNT

Medium Type: UNKNOWN

Additional Medium Information:

Injuries: Fatalites:

Evacuations: ○ Yes ◉ No ○ Unknown No. of Evacuations:

Damages: ○ Yes ◉ No ○ Unknown Damage Amount:

Federal Agency Notified: ○ Yes ○ No ◉ Unknown State Agency Notified: ○ Yes ○ No ◉ Unknown

Other Agency Notified: ○ Yes ○ No ◉ Unknown

Remedial Actions

CALLER STATED THE MATERIAL WAS CONTAINED AND THEY PLACED A CLAMPED ON THE LEAKING LINE.

Additional Info

CALLER HAD NO ADDITIONAL INFORMATION.

Latitude

Degrees: Minutes: Seconds: Quadrant:

Longitude

Degrees: Minutes: Seconds: Quadrant:

Distance from City: Direction:

Section: Township:

Range: Milepost:

Photo 1


Buckeye Chelsea Aston Tank Farm
Leak Site
Cherry Tree Road
Site Location Looking Northwest
Jan 4, 2010

Photo 2


Leak migrated to sewer line on Cherry Tree Road
Leaking Pipe
Buckeye Fence
Jan 4, 2010

Photo 3

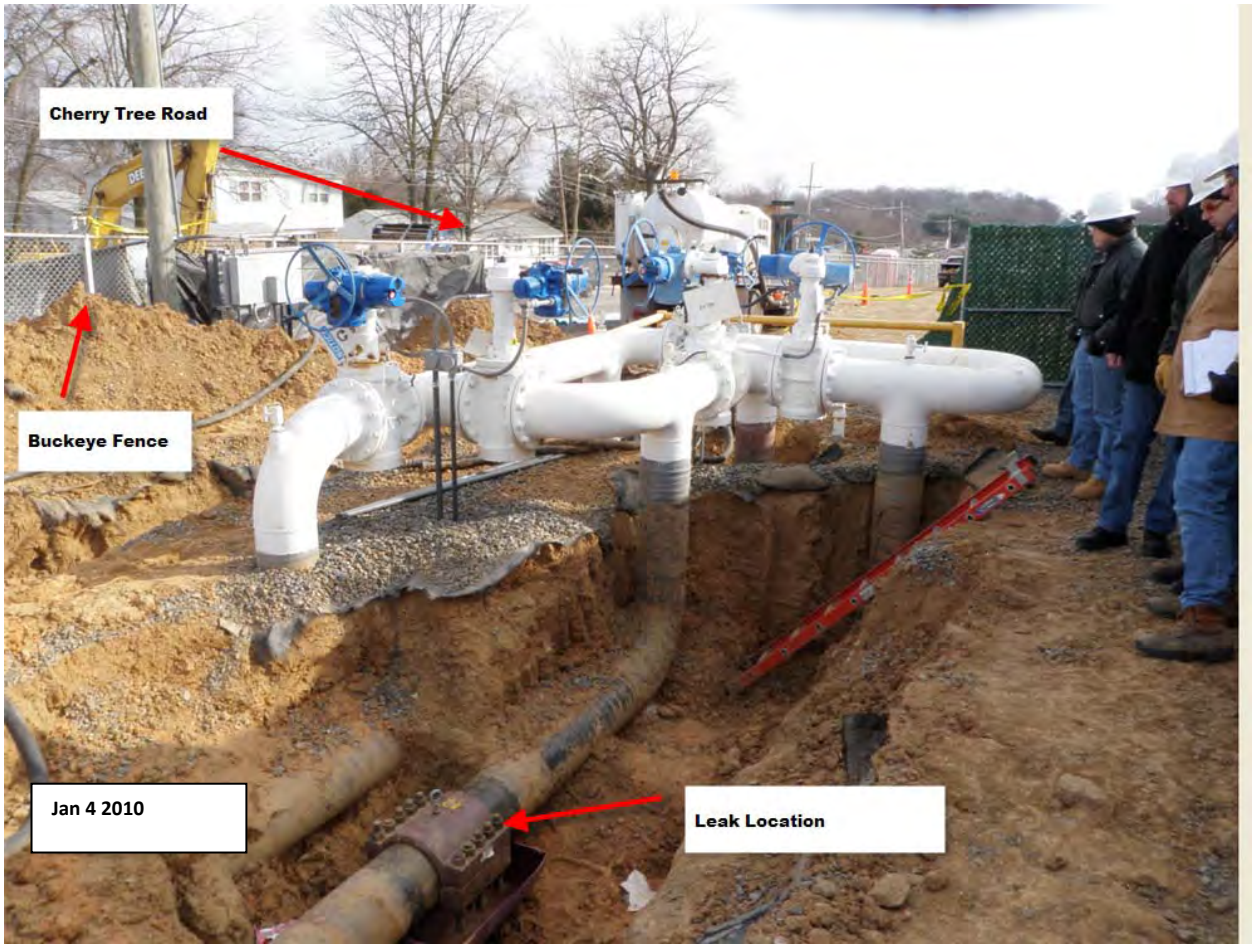


Photo 4

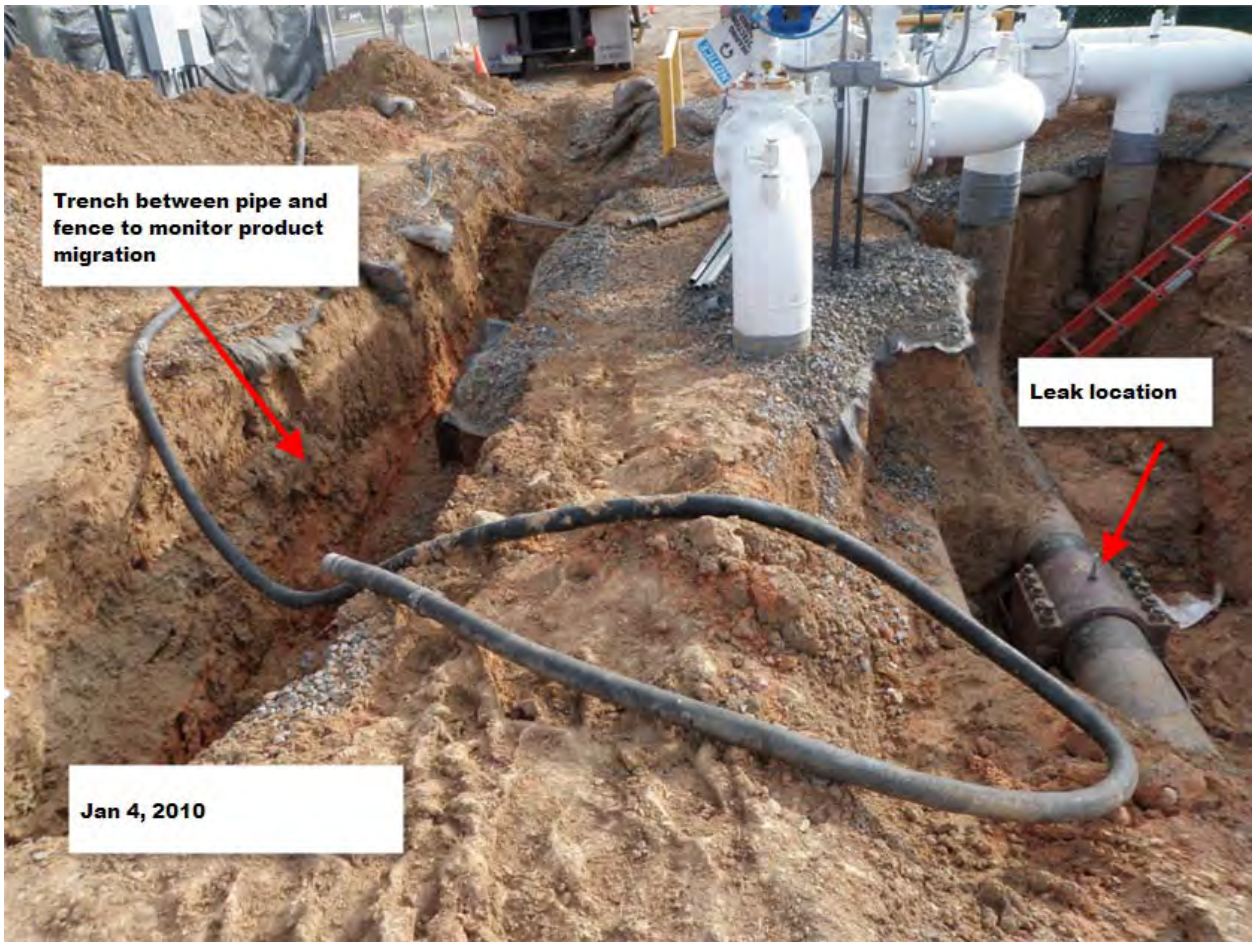
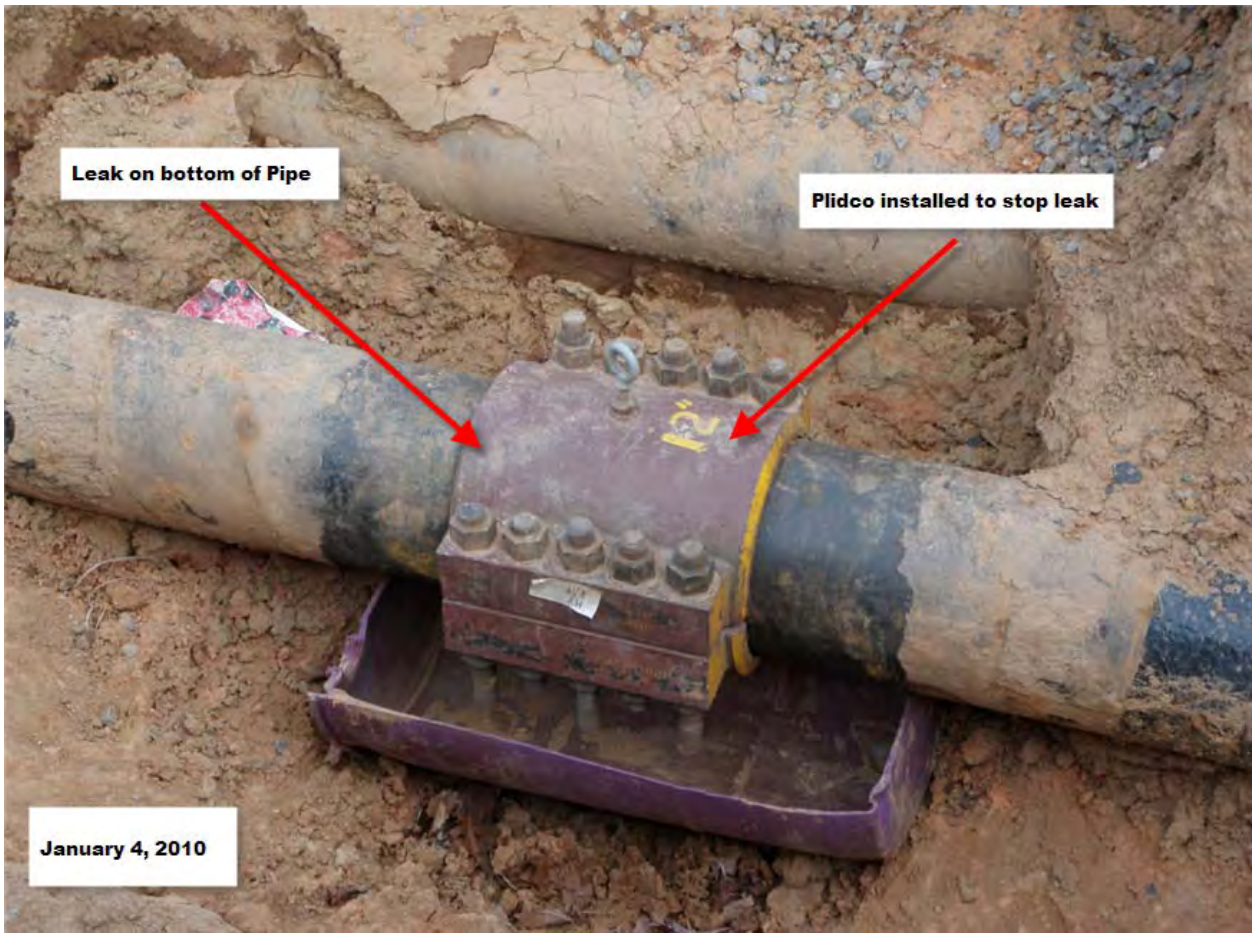

Trench between pipe and fence to monitor product migration
Leak location
Jan 4, 2010

Photo 5

Photo 5



Date	Time	Event
12/29/2009	22:00	Buckeye Partners' (Buckeye) control center in Breinigsville, PA received a call from the Aston, PA Fire Marshall reporting gasoline odors in the area of Clearview lane in Aston, PA. Buckeye's 8" pipeline in the area (CT553JP) had been shut down earlier in the day as part of a normal, scheduled shut down and the pipeline pressure was being monitored. After notification from Buckeye's control center, field personnel arrived at the site and confirmed the presence of gasoline odors.
12/30/2009	12:45	A representative of the Pennsylvania Department Of Environmental Protection (PADEP) measured gas odors in several adjacent sanitary sewer manholes as well as a few nearby residences. The fire department requested the evacuation of four residences as a precaution until the vapor levels subsided.
12/30/2009	1:40	A unified command was established by buckeye's local operations manager. Buckeye personnel proceeded to walk the pipeline right of way and although no visible product was seen, they did detect an odor in some areas. Buckeye decided to walk the pipeline right of way again during daylight hours and to dig test holes in the areas of high vapor levels.
12/30/2009	12:00	Buckeye had a total of ten locations probed between Cherry Tree street and Overlook street with no product found. The test holes dug on arbor lane were also found to be clean of product.
12/30/2009	12:28	The PADEP representative indicated that it appeared that the problem was in the vicinity of Scott lane because the sewer manholes on Cherry Tree street and Frazer street had high vapor levels. Buckeye decided to excavate the gasoline tank lines inside the adjacent Chelsea station since these pipelines were closer to Scott street.
12/30/2009	22:00	Buckeye personnel identified high vapor levels and visible product in the excavation at the tank junction valves in Chelsea station. The release was determined to be on the tank 701 line.
12/31/2009	1:30	Buckeye installed a Plidco sleeve, which stopped the release.
12/31/2009	12:00	All residents were cleared to safely return to their homes.
1/1/2010		The local sewer authority confirmed at least three breaches in the sanitary sewer line located under cherry tree street. These breaches allowed gasoline from the release to get into the sanitary sewer system. The local sewer authority is presently in the process of repairing the sewer system in this area. Buckeye continues to monitor the Plidco sleeve twice daily
2/8/2010		Buckeye has dug numerous test wells and continues to work on both the remediation of the release and determining the estimated volume. Buckeye notified all appropriate outside agencies of this incident.
2/12/2010		Permanent repairs were completed by cutting out the damaged pipe and replacing it with certified pipe. The damaged pipe has been sent to a laboratory for metallurgical analysis. Metallurgical analysis revealed the cause of the external corrosion to be microbiologically induced corrosion. Remediation is continuing.
3/1/2011		Operation of the facility was turned over to ConocoPhillips.