

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CITY OF FLEMINGSBURG AND CITY OF)	
FLEMINGSBURG UTILITY SYSTEM)	CASE NO. 2017-00079
ALLEGED FAILURE TO COMPLY WITH)	
KRS 278.495 and 49 CFR Part 192.605(a);)	
49 CFR Part 192.721; 49 CFR Part 199.105;)	
and 49 CFR 199.225)	

ORDER

The city of Flemingsburg operates, through a department of the city, the Flemingsburg Utility System (collectively “Flemingsburg”), a city-owned municipal utility whose operations include a natural gas system which engages in the distribution of natural gas at retail and which is subject to Commission jurisdiction with respect to safety. Pursuant to KRS 278.495, the Commission has authority to regulate the safety of natural gas facilities owned or operated by any public utility, county, or city and used to distribute natural gas at retail. KRS 278.992(1) establishes the penalties for violations of any minimum safety standard adopted by the United States Department of Transportation (“DOT”) pursuant to the federal pipeline safety laws, 49 U.S.C. Section 60101, *et seq.*, and amendments thereto, pursuant to KRS 278.495(2) and KRS 278.992(1).

Commission Staff submitted to the Commission an Incident Investigation Report (“Report”) describing an incident that occurred on January 28, 2016, at approximately 12:42 p.m. at 5043/5040 Main Street in Mays Lick, Mason County, Kentucky, and which is attached as the Appendix to this Order. The Report states:

On January 28, 2016, at 3:15 a.m., a gas odor was reported by the Maysville dispatch to Flemingsburg Utilities. An Operator Supervisor investigated the complaint, and a crew was assigned to repair the leak. The crew excavated the leak area and discovered a plastic mechanical saddle from a service-line at 5043 Main St. was leaking. The gas main was 4" plastic and the service-line was all plastic material as well with a pressure of 28 PSIG. Attempts were made to tighten the saddle to stop the leak, but with no success. The decision was made to install a new service-line tap and to temporarily install a clamp over the old service-line tap. During the process of installing the clamp an electrical impact wrench was used and during this process the leaking gas ignited causing a flash. A crew member was operating the electrical impact wrench at the time of the ignition which resulted in hospitalization overnight which required reporting to the Pipeline and Hazardous Materials Safety Administration.¹

The Report alleges that Flemingsburg is in violation of four sections of the Code of Federal Regulations ("CFR"), 49 CFR Parts 192 and 199. 49 CFR Part 192 prescribes minimum safety requirements for pipeline facilities and the transportation of gas. 49 CFR Part 199 requires operators of pipeline facilities subject to 49 CFR Parts 192, 193, or 195 to test covered employees for the presence of prohibited drugs and alcohol. Specifically, the sections alleged to be violated are as follows:

1. 49 CFR 192.605(a), Procedural manual for operations, maintenance, and emergencies.

(a) *General.* Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures of handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations and maintenance activities are conducted.

¹ Report at 1 and 2.

2. 49 CFR 192.751, Prevention of accidental ignition.

(a)² When a hazardous amount of gas is being vented into open air, each potential source of ignition must be removed from the area and a fire extinguisher must be provided.

3. 49 CFR 199.105, Drug tests required.

(b) *Post-accident testing.* As soon as possible but no later than 32 hours after an accident, an operator shall drug test each employee whose performance either contributed to the accident or cannot be completely discounted as a contributing factor to the accident. An operator may decide not to test under this paragraph but such a decision must be based on the best information available after the accident that the employee's performance could not have contributed to the accident or that, because of the time between that performance and the accident, it is not likely that a drug test would reveal whether the performance was affected by drug use.

4. 49 CFR 199.225,³ Alcohol tests required.

(a) *Post-accident.* (1) As soon as practicable following an accident, each operator shall test each surviving covered employee for alcohol if that employee's performance of a covered function either contributed to the accident or cannot be completely discounted as a contributing factor to the accident. The decision not to administer a test under this section shall be based on the operator's determination, using the best available information at the time of the determination, that the covered employee's performance could not have contributed to the accident.

The Report alleges that Flemingsburg, in violation of 49 CFR 192.605(a), did not follow portions of its operations and maintenance manual ("O&M Manual"). Specifically,

² Although the Report references 49 CFR 192.751(c), the pertinent portion of the CFR quoted in the Report is set forth at 49 CFR 192.751(a).

³ Although the Report references 49 CFR 199.125, the pertinent portion of the CFR quoted in the Report is set forth at 49 CFR 199.225.

the Report alleges the following: Flemingsburg failed to follow page 7, section M-1, of this O&M Manual by failing to remove each ignition source when gas is being vented into open air; using an internal combustion generator close to the excavation; and using an electrical impact wrench to make repairs with leaking gas present.⁴ Flemingsburg failed to follow page 3, section E-1, of its O&M Manual in that there were no records in the documentation provided to Staff that Flemingsburg pressure tested the new and replaced pipeline to substantiate the maximum allowable operating pressures (“MAOP”).⁵ The Report alleges that Flemingsburg, in violation of 49 CFR 192.751(a), did not remove potential ignition sources during the repair of the leak.⁶ The Report alleges that Flemingsburg, in violation of 49 CFR 199.105(b) and 49 CFR 199.225(a) and page 3 of its Drug and Alcohol Testing policy, failed to post-accident drug test any employees and failed to post-accident alcohol test its employees involved in the incident.⁷

Based on its review of the Report and being otherwise sufficiently advised, the Commission finds that *prima facie* evidence exists that Flemingsburg has failed to comply with 49 CFR 192.605(a), 49 CFR 192.751(a), 49 CFR 199.105(b), and 49 CFR 199.225(a). We further find that a formal investigation into the incident that is the subject matter of the Report should be conducted and that this investigation should also examine Flemingsburg’s safety practices related to the construction, installation, and repair of natural gas facilities.

⁴ *Id.* at 2

⁵ *Id.*

⁶ *Id.*

⁷ *Id.* at 3.

The Commission, on its own motion, HEREBY ORDERS that:

1. The city of Flemingsburg and the Flemingsburg Utility System shall submit to the Commission, within 20 days of the date of this Order, a written response to the allegations contained in the Report.

2. The city of Flemingsburg and the Flemingsburg Utility System shall submit to the Commission, within 20 days of the date of this Order, a written report that identifies the employees on site at the time of the January 28, 2016 incident and shall identify the employee that was injured.

3. The city of Flemingsburg and the Flemingsburg Utility System shall submit to the Commission, within 20 days of the date of this Order, its manual of written procedures for conducting operation and maintenance activities and for emergency response in effect at the time of the January 28, 2016 incident.

4. The city of Flemingsburg and the Flemingsburg Utility System shall submit, within 20 days of the date of this Order, any revisions or amendments made to its manual of written procedures for conducting operations and maintenance activities and for emergency response as a result of the January 28, 2016 incident or the Report within 20 days of the date of this Order.

5. The city of Flemingsburg and the Flemingsburg Utility System shall appear on June 13, 2017, at 9:00 a.m. Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard in Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violations of 49 CFR 192.605(a), 49 CFR 192.751(a), 49 CFR 199.105(b), and 49 CFR 199.225(a) and of showing cause why the

city of Flemingsburg and the Flemingsburg Utility System should not be subject to the penalties prescribed in KRS 278.992(1) for these alleged violations.

6. The city of Flemingsburg and the Flemingsburg Utility System shall, in addition to any other witnesses they may seek to present, produce as witnesses for examination at the June 13, 2017 hearing the employees on site at the time of the January 28, 2016 incident and also Flemingsburg's utilities superintendent, Joe Edward Dunaway, Jr.

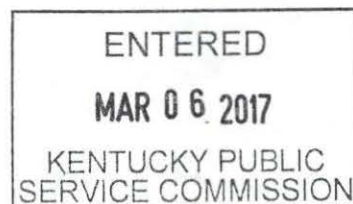
7. At the scheduled hearing in this matter, the city of Flemingsburg and the Flemingsburg Utility System shall also present evidence on the safety of its practices related to the construction, installation, and repair of natural gas facilities and whether such practices required revisions as a result of this incident.

8. The June 13, 2017 hearing shall be recorded by digital video recording only.

9. The Report in the Appendix to this Order is made part of the record in the case.

10. Any requests for an informal conference with Commission Staff shall be set forth in writing and filed with the Commission within 20 days of the date of this Order.

By the Commission



ATTEST:


Executive Director

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2017-00079 DATED **MAR 06 2017**



Matthew G. Bevin
Governor

Charles G. Snavelly
Secretary
Energy and Environment Cabinet

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James W. Gardner
Chairman

Daniel E. Logsdon Jr.
Vice Chairman

J. Roger Thomas
Commissioner

Gas Pipeline Safety Branch Incident Investigation Report -

Flemingsburg Utilities

Date of Incident: January 28, 2016

Location of Incident: 5043/5040 Main Street
Mays Lick, KY.

Name of Operator: Flemingsburg Utilities (ID # 5230)

Operator Type: Municipal Operator

Investigation Terms and Abbreviations

Kentucky Public Service Commission - **KPSC**
Maximum Allowable Operating Pressure - **MAOP**
All pressures referenced are Pounds per Square Inch Gage - **PSIG**.
Title 49 Code of Federal Regulations Part 192 – **49 CFR 192**
Operation and Maintenance Manual – **O&M**

Incident Description

This incident occurred at 5043/5040 Main Street in Mays Lick, KY., Mason County, at approximately 12:42 pm on January 28, 2016. On January 28, 2016 at 3:15 am a gas odor was reported by the Maysville dispatch to Flemingsburg Utilities. An Operator Supervisor investigated the complaint, and a crew was assigned to repair the leak. The crew excavated the leak area and discovered a plastic mechanical saddle from a service-line at 5043 Main St. was leaking. The gas main was 4" plastic and the service-line was all plastic material as well with a pressure of 28 PSIG. Attempts were made to tighten the saddle to stop the leak, but with no success. The decision was made to install a new service-line tap and to temporarily install a clamp over the old service-line tap. During the process of installing the clamp an electrical impact wrench was used and during this process the leaking gas ignited causing a flash. A crew member was operating the electrical impact wrench at the time of the ignition which resulted in hospitalization overnight which required reporting to the Pipeline and Hazardous Materials

Safety Administration(Attachment D). After the incident a new section of main was replaced and a new section of service line was also replaced. During the investigation there were not any records available to verify test pressures for these new sections of pipe.

Response to Incident – (Notification)

KPSC

Flemingsburg Utilities reported the incident to KPSC telephonic system on January 28, 2016 at 2:25 pm. On February 1, 2016 the branch manager, Jason Hurt, informed Steve Samples and Joel Grugin to start an incident investigation. Arrangements were then made for Steve Samples and Joel Grugin to meet with Joe Dunaway and Danny Shroul of Flemingsburg Utilities on February 4, 2016 to obtain details of the incident. More information of the incident was also gathered on March 2, 2016 by Steve Samples and Mark McCullough.

Investigation

KPSC

The purpose of this investigation is to determine if Flemingsburg Utilities was in compliance with Federal pipeline safety regulations and subsequently Flemingsburg Utilities own Gas Operating, Maintenance and Emergency procedures. The regulations relating to this incident are Title 49 Code of Federal regulations Part 191,192, and 199.

Findings

- **49 CFR 192.605(a)**

General, each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response

Finding 1:

Flemingsburg Utilities did not follow their O&M manual (page 7, section M-1) which states; each ignition source will be removed when gas is being vented into open air. Maintenance crew used an internal combustion generator close to the excavation, and used an electrical impact wrench to make repairs with leaking gas present. The Operators training modules for Tasks M-7, (Prevent accidental ignition) page 38 also warns of this danger. (Attachment A)

Finding 2:

Flemingsburg Utilities did not follow the O&M manual (page 3, section E-1) which states all new and replaced pipelines must be pressure tested to substantiate the MAOP. There were no records in the documentation provided that this occurred for the replaced section of main or the replaced service line. (Attachment B)

- **49 CFR 192.751 Prevention of accidental ignition**

(c) When a hazardous amount of gas is being vented into open air, each potential source of ignition must be removed from the area and a fire extinguisher must be provided.

Finding 3:

Flemingsburg Utilities did not remove potential ignition sources during the repair of the stated leak. An electrical impact wrench was being used during the flash that occurred while attempting to stop the leak. A combustion engine generator was also used during repair process beside the excavation site.

- **49 CFR 199.105 Drug tests required**

- *(b) Post - accident testing. As soon as possible but no later than 32 hours after an accident, an operator shall drug test each employee whose performance either contributed to the accident or cannot be completely discounted as a contributing factor to the accident.*

Finding 4:

Flemingsburg Utilities did not post-accident drug test any employees. Page 3 of Flemingsburg Utilities Drug and Alcohol Policy has these procedures in place for post-accident testing. (Attachment C)

- **49 CFR 199.125 (a) Post-accident**

As soon as practical following an accident, each operator shall test each surviving covered employee for alcohol.

Finding 5:

Flemingsburg Utilities did not post-accident alcohol test its employees involved per Drug and Alcohol Policy. (Attachment C)

Recommendations

(1) Flemingsburg Utilities should obtain and use proper protective equipment for working in hazardous situations such as oxygen monitors, respirators, fire retardant clothing, hard hats, gloves, and life lines.

(2) Flemingsburg Utilities should retrain and stress importance of Operator Qualification task M-7(Prevent Accidental Ignition) and O&M procedures to all employees.

(3) Flemingsburg Utilities gas operations supervisors should perform mock emergencies to periodically test employees on knowledge and skills for gaseous atmosphere situations.

(4) Flemingsburg Utilities should submit the final incident report (Pipeline and Hazardous Materials safety Administration form 7100.1)

(5) Flemingsburg Utilities gas maintenance personal monitoring fire extinguishers should attend Kentucky Gas Association fire school.

Attachments

Attachment A: Flemingsburg Utilities; page 7, Operation and Maintenance Manual & p.38 of Operator Qualification Task M-7.

Attachment B: Flemingsburg Utilities; page 3, Operation and Maintenance Manual

Attachment C: Flemingsburg Utilities; page 7, Drug and Alcohol Testing Policy

Attachment D: PHMSA Incident Report

Investigated By: Steve Samples, Utility Regulatory & Safety Investigator

Report By: Steve Samples 6/13/16

Steve Samples

Date

ATTACHMENT A

Flemingsburg Utilities; page 7, Operation and
Maintenance Manual and page 38 of Operator
Qualification Task M-7

OPERATION AND MAINTENANCE PLAN
FOR
THE CITY OF FLEMINGSBURG
NATURAL GAS SYSTEM

L. Key Valve Testing (cont.)

5. Records

Key valve testing records will be maintained for the life of the pipeline and will include all of the following:

- a. Date of test
- b. List of valves tested, including location
- c. Description of any valve that did not operate properly
- d. Maintenance or repairs done on any valve

M. Prevention of Accidental Ignition

1. When gas is being vented to open air, each potential source of ignition will be removed and a fire extinguisher will be provided.
2. Gas or electric welding or cutting may not be performed on pipelines that contain a combustible mixture of gas and air.
3. When venting gas, warning signs will be posted when appropriate.

N. Corrosion Control

1. Cathodic Protection – General

All steel pipelines with an effective external coating will be cathodically protected in accordance with this procedure.

2. Existing Underground Bare Steel Pipe

Pipe is considered bare if it has no external coating or the cathodic protection requirements are substantially the same as bare pipe.

- a. These pipelines will be monitored for active corrosion every three (3) years by electrical survey, study of leak history records, leak survey or other means.
- b. These pipelines will be cathodically protected in areas of active corrosion.

3. Examination of Buried Pipe

Whenever buried metallic pipelines are exposed, the condition of the pipe must be recorded and remedial action taken if necessary. The record will contain:

- a. Precise location of the pipeline section viewed
- b. Type of pipe and diameter
- c. Condition of external coating
- d. Extent of corrosion, if any

Preventing Accidental Ignition Caused by Electric Arcing²

Sparks range in temperature from 1500°F in an electrical switch to 9,000°F in an arc welder. Sparks may be generated by:

- Communication equipment
 - Portable electrically powered tools and equipment
 - Internal combustion engines
 - Breaking electrical continuity
 - Static electricity on plastic pipe
- (1) **Communication Equipment.** Cell phones, pagers, etc., not approved for hazardous atmospheres should not be taken into a gaseous atmosphere.
 - (2) **Portable Electrically Powered Tools and Equipment.** Flashlights, portable floodlights and extension cords, and any other electrically powered tool or equipment should be of a type approved for use in hazardous atmospheres.
 - (3) **Internal Combustion Engines.** Internal combustion engines that power trucks, cars, compressors, pumps, generators and other equipment should not be operated in suspected or known hazardous atmospheres.
 - (4) **Breaking Electrical Continuity.** Electricity on gas facilities can produce an electric shock to a worker. An electric arc can be produced when a steel main is cut or separated. This potential ignition source can be present because:
 - Gas piping has been used for a ground for an electric service.
 - Alternating current may be induced on gas lines running parallel to or near high voltage electric transmission lines.
 - Stray direct currents may be carried by pipelines in areas where direct current systems are used.
 - Direct current may be present on pipelines as a result of cathodic protection devices such as anodes or rectifiers.

To prevent arcing and the possible ignition of gas when a steel main is to be separated, install temporary bonding clamps across the area where the cut is to be made. This will allow a path for electrical current that could be on the main. This will prevent having an electric arc.

² 49 CFR, 192.751 Guide Material 1.2

ATTACHMENT B

Flemingsburg Utilities; page 3, Operation and
Maintenance Manual

OPERATION AND MAINTENANCE PLAN
FOR
THE CITY OF FLEMINGSBURG
NATURAL GAS SYSTEM

E. Pressure Tests

1. All new pipelines or pipelines that have been relocated or replaced must be tested for leaks and to substantiate MAOP.
2. All pipelines, except service lines and plastic pipe, will be tested to discover all leaks. The pipe will be tested for 20 minutes as follows:

<u>Operating Pressure</u>	°	<u>Test Pressure</u>
less than 1 psig		at least 10 psig
at or above 1 psig		at least 90 psig

3. Service lines other than plastic must be leak tested before being placed into service. The service line connection to the main must be included in this test, if feasible. If not, the connection to the main must be given a leak test at operating pressure. The following test pressures apply:

<u>Operating Pressure</u>	<u>Test Pressure</u>
up to 40 psig	at least 50 psig
above 40 psig	at least 90 psig

4. Plastic mains and services must be tested to 1.5 times the MAOP or 50 psig, whichever is greater. The temperature of the pipe must be less than 100° F during the test.
5. Leak repairs will be tested at operating pressure by soap suds test to verify that the leak has stopped.

F. Damage Prevention Program

When an excavation is planned on any property, or when an excavation by someone else on any property is discovered, the following actions will be taken:

1. Determine if the excavation is planned within five (5) feet of the horizontal plane of an underground gas line, or whether a blasting operation will be close enough to disrupt or damage an underground gas line.
2. Notify the excavator that you do or do not have underground gas lines in danger from this excavation. If you do, mark the lines within 18 inches on either side of the line with high visibility yellow paint.
3. Once excavation begins, the excavation will be monitored to ensure that underground gas lines are not damaged by the excavator.

ATTACHMENT C

Flemingsburg Utilities; page 7, Drug and Alcohol Testing
Policy

this policy be subject to unannounced drug testing based on random selection, including temporary employees. [NOTE: The City's policy includes random testing for alcohol.]

(2) (a) At least fifty percent (50%) of employees required to be tested under federal law must be tested every twelve (12) months for drugs, and ten percent (10%) must be tested every twelve months for alcohol.

(b) For all remaining employees, at least ten percent (10%) must be tested for drugs every twelve (12) months, and ten percent (10%) must be tested for alcohol every twelve (12) months in a separate pool.

(c) All persons will be subject to be randomly picked for drug and alcohol testing at each random testing date. An individual may be randomly picked more than once or not picked at all during the annual period.

(3) A random selection procedure will be used in selecting the employees to be tested each testing period.

(4) The selection procedure will select sufficient additional numbers (names) to be used to reach the appropriate testing level during each test period. These alternate numbers (names) will be tested in order of selection only if persons selected are unavailable for testing due to vacations, medical leave, or travel requirements.

(5) Random testing will be done at least on a quarterly basis.

c. Post-Accident Testing:

(1) Following an accident, as defined in (3) below, each surviving covered employee will promptly be tested for drugs and alcohol if that employee's performance contributed to the accident or cannot be completely discounted as a contributing factor to the accident. The decision not to administer a drug and alcohol test will be based on a policy administrator's determination that the employee's performance can be discounted completely as a causative or contributing factor.

(2) The employee will be tested as soon as possible, but no later than thirty-two (32) hours for drugs and eight (8) hours for alcohol after the accident. If a test is not administered within two (2) hours following the accident, the policy administrator must still attempt to administer the test, and prepare and maintain on file a record stating the reasons the test was not promptly administered. If an alcohol test is not administered within eight (8) hours following an accident, the policy administrator will stop trying to conduct an alcohol test and shall maintain the same record.

(3) An "accident" on a gas pipeline or LNG facility is defined as follows:

(a) Gas pipeline facilities: An accident means an "incident" in 49 CFR Section 191 involving gas pipeline facilities, which includes all parts of those physical facilities through which gas moves in transportation, including but limited to pipe,

ATTACHMENT D

PHMSA Incident Report

NOTICE: This report is required by 49 CFR Part 191. Failure to report can result in a civil penalty not to exceed 100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$1,000,000 as provided in 49 USC 60122.

OMB NO: 2137-0522
EXPIRATION DATE: 10/31/2017



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

Original Report
Date:

02/19/2016

No.

20160017- 16249

(DOT Use Only)

INCIDENT REPORT - GAS DISTRIBUTION SYSTEM

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0522. All responses to this collection of information are mandatory. Send comments regarding the burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

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

PART A - KEY REPORT INFORMATION

Report Type: (select all that apply)	Original: Yes	Supplemental:	Final:
Last Revision Date			
1. Operator's OPS-issued Operator Identification Number (OPID):	5230		
2. Name of Operator	FLEMINGSBURG UTILITIES SYSTEM		
3. Address of Operator:			
3a. Street Address	116 MAIN CROSS STREET		
3b. City	FLEMINGSBURG		
3c. State	Kentucky		
3d. Zip Code	41041		
4. Local time (24-hr clock) and date of the Incident:	01/28/2016 12:42		
5. Location of Incident:			
5a. Street Address or location description	5040 Main Street		
5b. City	Mayslick		
5c. County or Parish	Mason		
5d. State:	Kentucky		
5e. Zip Code:	41055-0000		
5f. Latitude:	38.51881		
Longitude:	-83.84138		
6. National Response Center Report Number:	1139171		
7. Local time (24-hr clock) and date of initial telephonic report to the National Response Center:	01/28/2016 14:43		
8. Incident resulted from:	Unintentional release of gas		
9. Gas released:	Natural Gas		
- Other Gas Released Name:			
10. Estimated volume of gas released - Thousand Cubic Feet (MCF):	5.000		
11. Were there fatalities?	No		
- If Yes, specify the number in each category:			
11a. Operator employees			
11b. Contractor employees working for the Operator			
11c. Non-Operator emergency responders			
11d. Workers working on the right-of-way, but NOT associated with this Operator			
11e. General public			
11f. Total fatalities (sum of above)			
12. Were there injuries requiring inpatient hospitalization?	Yes		
- If Yes, specify the number in each category:			
12a. Operator employees	1		
12b. Contractor employees working for the Operator	0		
12c. Non-Operator emergency responders	0		
12d. Workers working on the right-of-way, but NOT associated with this Operator	0		
12e. General public	0		
12f. Total injuries (sum of above)	1		
13. Was the pipeline/facility shut down due to the incident?	No		
- If No, Explain:	Vented leak, fixed live.		
- If Yes, complete Questions 13a and 13b: (use local time, 24-hr clock)			

13a. Local time and date of shutdown:	
13b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
14. Did the gas ignite?	Yes
15. Did the gas explode?	No
16. Number of general public evacuated:	0
17. Time sequence (use local time, 24-hour clock):	
17a. Local time operator identified Incident - effective 10-2014, "Incident" changed to "failure"	01/28/2016 03:00
17b. Local time operator resources arrived on site:	01/28/2016 08:30
PART B - ADDITIONAL LOCATION INFORMATION	
1. Was the Incident on Federal land?	No
2. Location of Incident	Utility Right-of-way / Easement
3. Area of incident:	Underground
Specify:	Exposed due to excavation
If Other, Describe:	
Depth of Cover:	36
4. Did Incident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing -	
Cased/ Uncased:	
- If Railroad crossing -	
Cased/ Uncased/ Bored/drilled	
- If Road crossing -	
Cased/ Uncased/ Bored/drilled	
- If Water crossing -	
Cased/ Uncased	
Name of body of water (If commonly known):	
Approx. water depth (ft):	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Indicate the type of pipeline system:	Municipally Owned
- If Other, specify:	
2. Part of system involved in Incident:	Main
- If Other, specify:	
2a. Year "Part of system involved in Incident" was installed:	1996
3. When "Main" or "Service" is selected as the "Part of system involved in Incident" (from PART C, Question 2), provide the following:	
3a. Nominal diameter of pipe (in):	4
3b. Pipe specification (e.g., API 5L, ASTM D2513):	ASTM D2513
3c. Pipe manufacturer:	Ameriflow
3d. Year of manufacture:	Unknown
4. Material involved in Incident:	Plastic
- If Other, specify:	
4a. If Steel, Specify seam type:	None/Unknown?
4b. If Steel, Specify wall thickness (inches):	
4c. If Plastic, Specify type:	Polyethylene (PE)
- If Other, describe:	
4d. If Plastic, Specify Standard Dimension Ratio (SDR):	
Or wall thickness:	.438
4e. If Polyethylene (PE) is selected as the type of plastic in Part C, Question 4.c:	
- Specify PE Pipe Material Designation Code (i.e. 2406, 3408, etc.)	2406
Unknown?	
5. Type of release involved :	Leak
- If Mechanical Puncture - Specify Approx size:	
Approx. size: in. (axial):	
in. (circumferential):	
- If Leak - Select Type:	Seal or Packing
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: (widest opening):	
(length circumferentially or axially):	
- If Other - Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Class Location of Incident :	Class 2 Location
2. Estimated Property Damage :	
2a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 6-2011, "paid/reimbursed by the Operator" removed	\$ 0
Estimated cost of gas released – effective 6-2011, moved to item 2f	
2b. Estimated cost of Operator's property damage & repairs	\$ 0
2c. Estimated cost of Operator's emergency response	\$ 500
2d. Estimated other costs	\$ 0
- Describe:	
2e. Property damage subtotal (sum of above)	\$ 500
Cost of Gas Released	
2f. Estimated cost of gas released	\$ 20
Total of all costs	\$ 520
3. Estimated number of customers out of service:	
3a. Commercial entities	0
3b. Industrial entities	0
3c. Residences	0
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Incident (psig):	28.00
2. Normal operating pressure at the point and time of the Incident (psig):	28.00
3. Maximum Allowable Operating Pressure (MAOP) at the point and time of the Incident (psig):	90.00
4. Describe the pressure on the system relating to the Incident:	Pressure did not exceed MAOP
5. Was a Supervisory Control and Data Acquisition (SCADA) based system in place on the pipeline or facility involved in the Incident?	No
- If Yes:	
5a. Was it operating at the time of the Incident?	
5b. Was it fully functional at the time of the Incident?	
5c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the detection of the Incident?	
5d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Incident?	
6. How was the incident initially identified for the Operator?	Notification from Emergency Responder
- If Other, Specify:	
6a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 6, specify.	
7. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Incident?	No, the facility was not monitored by a controller(s) at the time of the Incident
- If "No, the operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to:"	
(provide an explanation for why the operator did not investigate)	
- If Yes, Specify investigation result(s) (select all that apply):	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Incident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. How many were tested:	
1b. How many failed:	
2. As a result of this Incident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. How many were tested:	
2b. How many failed:	
PART G - CAUSE INFORMATION	
<i>Select only one box from PART G in shaded column on left representing the Apparent Cause of the Incident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Incident in the narrative (PART H).</i>	
Apparent Cause:	G4 - Other Outside Force Damage
G1 - Corrosion Failure -- only one sub-cause can be picked from shaded left-hand column	
Corrosion Failure Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Specify:	
2. Type of corrosion:	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following:	
- Field examination	
- Determined by metallurgical analysis	
- Other	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes:	
4a. Was failed item considered to be under cathodic protection at the time of the incident?	
- If Yes, Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the incident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the incident?	
If "Yes, CP Annual Survey" -- Most recent year conducted:	
If "Yes, Close Interval Survey" -- Most recent year conducted:	
If "Yes, Other CP Survey" -- Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
6. Pipeline coating type, if steel pipe is involved:	
- If Other, Describe:	
- If Internal Corrosion:	
7. Results of visual examination:	
- If Other, Describe:	
8. Cause of corrosion (select all that apply):	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other	

	- If Other, Specify:
9. The cause(s) of corrosion selected in Question 8 is based on the following: <i>(select all that apply)</i> :	
- Field examination	
- Determined by metallurgical analysis	
- Other	
	- If Other, Describe:
10. Location of corrosion <i>(select all that apply)</i> :	
- Low point in pipe	
- Elbow	
- Drop-out	
- Other	
	- If Other, Describe:
11. Was the gas/fluid treated with corrosion inhibitor or biocides?	
12. Were any liquids found in the distribution system where the Incident occurred?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Part of system involved in Incident" (from PART C, Question 2) is Main, Service, or Service Riser.	
13. Date of the most recent Leak Survey conducted	
14. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
	Most recent year tested:
	Test pressure:
G2 – Natural Force Damage – only one sub-cause can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
	- If Other, Specify:
- If Heavy Rains/Floods:	
2. Specify:	
	- If Other, Specify:
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
	- If Other, Specify:
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Incident generated in conjunction with an extreme weather event?	
6.a If Yes, specify <i>(select all that apply)</i> :	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
	- If Other, Specify:
G3 – Excavation Damage – only one sub-cause can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage due to Excavation Activity: Complete the following ONLY IF the "Part of system involved in Incident" (from Part C, Question 2) is Main, Service, or Service Riser.	
1. Date of the most recent Leak Survey conducted	
2. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
	Most recent year tested:
	Test pressure:
Complete the following if Excavation Damage by Third Party is selected.	
3. Did the operator get prior notification of the excavation activity?	
3a. If Yes, Notification received from: <i>(select all that apply)</i> :	
- One-Call System	

- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
4. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
5. Right-of-Way where event occurred (select all that apply):	
- Public	
- If Public, Specify:	
- Private	
- If Private, Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
6. Type of excavator :	
7. Type of excavation equipment :	
8. Type of work performed :	
9. Was the One-Call Center notified?	
9a. If Yes, specify ticket number:	
9b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
10. Type of Locator:	
11. Were facility locate marks visible in the area of excavation?	
12. Were facilities marked correctly?	
13. Did the damage cause an interruption in service?	
13a. If Yes, specify duration of the interruption:	
14. Description of the CGA-DIRT Root Cause (select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):	
- Root Cause Description:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - only one sub-cause can be selected from the shaded left-hand column	
Other Outside Force Damage – Sub-Cause:	Electrical Arcing from Other Equipment or Facility
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Specify:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete the following ONLY IF the "Part of system involved in Incident" (from Part C, Question 2) is Main, Service, or Service Riser.	
3. Date of the most recent Leak Survey conducted:	
4. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
- If Intentional Damage:	
5. Specify:	
- If Other, Specify:	
- If Other Outside Force Damage:	
6. Describe:	

G5 - Pipe, Weld, or Joint Failure - only one sub-cause can be selected from the shaded left-hand column

Pipe, Weld or Joint Failure – Sub-Cause:	
- If Body of Pipe:	
1. Specify:	
	- If Other, Describe:
- If Butt Weld:	
2. Specify:	
	- If Other, Describe:
- If Fillet Weld:	
3. Specify:	
	- If Other, Describe:
- If Pipe Seam:	
4. Specify:	
	- If Other, Describe:
- If Mechanical Fitting:	
5. Specify the mechanical fitting involved:	
	- If Other, Describe:
6. Specify the type of mechanical fitting:	
	- If Other, Describe:
7. Manufacturer:	
8. Year manufactured:	
9. Year installed:	
10. Other attributes:	
11. Specify the two materials being joined:	
11a. First material being joined:	
	- If Other, Specify:
11b. If Plastic, specify:	
	- If Other Plastic, specify:
11c. Second material being joined:	
	- If Other, Specify:
11d. If Plastic, specify:	
	- If Other Plastic, Specify:
12. If used on plastic pipe, did the fitting – as designed by the manufacturer – include restraint?	
12a. If Yes, specify:	
- If Compression Fitting:	
13. Fitting type:	
14. Manufacturer:	
15. Year manufactured:	
16. Year installed:	
17. Other attributes:	
18. Specify the two materials being joined:	
18a. First material being joined:	
	- If Other, specify:
18b. If Plastic, specify:	
	- If Other Plastic, specify:
18c. Second material being joined:	
	If Other, specify:
18d. If Plastic, specify:	
	- Other Plastic, specify:
- If Fusion Joint:	
19. Specify:	
	- If Other, Specify:
20. Year installed:	
21. Other attributes:	
22. Specify the two materials being joined:	
22a. First material being joined:	
	- If Other, Specify:
22b. Second material being joined:	
	- If Other, Specify:
- If Other Pipe, Weld, or Joint Failure:	
23. Describe:	

Complete the following if any Pipe, Weld, or Joint Failure sub-cause is selected.	
24. Additional Factors (select all that apply):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other	
	- If Other, Specify:
25. Was the Incident a result of:	
- Construction defect	
	Specify:
- Material defect	
	Specify:
	- If Other, Specify:
- Design defect	
- Previous damage	
26. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
	Most recent year tested:
	Test pressure:
G6 - Equipment Failure - only one sub-cause can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify:	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- Pressure Regulator	
- Other	
	- If Other, Specify:
- If Threaded Connection Failure:	
2. Specify:	
	- If Other, Specify:
- If Non-threaded Connection Failure:	
3. Specify:	
	- If Other, Specify:
- If Valve:	
4. Specify:	
	- If Other, Specify:
4a. Valve type:	
4b. Manufactured by:	
4c. Year manufactured:	
- If Other Equipment Failure:	
5. Describe:	
G7 - Incorrect Operation - only one sub-cause can be selected from the shaded left-hand column	
Incorrect Operation Sub-Cause:	
- If Other Incorrect Operation:	
1. Describe:	

Complete the following if any Incorrect Operation sub-cause is selected.	
2. Was this Incident related to: (select all that apply)	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other	
- If Other, Describe:	
3. What category type was the activity that caused the incident:	
4. Was the task(s) that led to the incident identified as a covered task in your Operator Qualification Program?	
4a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Incident Cause - only one sub-cause can be selected from the shaded left-hand column	
Other Incident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	
PART H - NARRATIVE DESCRIPTION OF THE INCIDENT	
Operator caused arcing while using a electrical powered tool to tighten up bolts while gas was leaking.	
PART I - PREPARER AND AUTHORIZED SIGNATURE	
Preparer's Name	Joe Edward Dunaway Jr.
Preparer's Title	Utilities Superintendent
Preparer's Telephone Number	606-748-8778
Preparer's E-mail Address	joedunaway@altiusbb.com
Preparer's Facsimile Number	606-845-0712
Authorize Signature's Name	Joe Edward Dunaway Jr.
Authorized Signature's Title	Utilities Superintendent
Authorized Signature's Email Address	joedunaway@altiusbb.com

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