

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

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AUG 28 2017

PUBLIC SERVICE  
COMMISSION

IN THE MATTER OF:

CITY OF FLEMINGSBURG AND CITY OF )  
FLEMINGSBURG UTILITY SYSTEM )  
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 )

CASE NO. 2017-00079

**SUPPLEMENT OF THE RECORD  
BY CITY OF FLEMINGSBURG**

Comes the City of Flemingsburg and City of Flemingsburg Utility System, by and through counsel, and supplement the record with the Final/Supplemental PHMSA Report e-mailed by Superintendent Joe Dunaway on August 17, 2017. Also enclosed is the narrative. When Mr. Dunaway reviewed the Final/Supplemental PHMSA Report online, it showed the entire narrative. However, when he printed the report, it did not contain the entire narrative. Out of abundance of caution, the entire narrative is also attached.

MacDonald, Walton & Razor, PLLC

By: \_\_\_\_\_

Kimberly Leet Razor, Assistant City Attorney

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing document was filed with the Commission by mailing the original and ten copies to Talina R. Matthews, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, KY 40601, and to parties of record this 23 day of August, 2017.



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Kimberly Leet Razor

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- 16622

(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:                     | Supplemental: | Final: |
|--|-------------------------------|---------------|--------|
|  |                               | Yes           |        |
| Last Revision Date   | 08/18/2017                    |               |        |
| 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?                                       | Yes                           |               |        |
| - If No, Explain:  |                               |               |        |
| - If Yes, complete Questions 13a and 13b: (use local time, 24-hr clock)                            |                               |               |        |

|  |                                 |
|--|---------------------------------|
| 13a. Local time and date of shutdown:  | 01/30/2016 08:00                |
| 13b. Local time pipeline/facility restarted:   | 01/30/2016 12:00                |
| - 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                |
| <b>PART B - ADDITIONAL LOCATION INFORMATION</b>  |                                 |
| 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):  |                                 |
| <b>PART C - ADDITIONAL FACILITY INFORMATION</b>  |                                 |
| 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:   |                                 |

| <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b>  |   |
|---|---|
| 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  |
| <b>Cost of Gas Released</b>   |   |
| 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   |
| <b>PART E - ADDITIONAL OPERATING INFORMATION</b>  |   |
| 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):  | 60.00   |
| 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:"<br>(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:   |   |

| <b>PART F - DRUG &amp; ALCOHOL TESTING INFORMATION</b>  |                          |
|---|--------------------------|
| 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:  |                          |
| <b>PART G - CAUSE INFORMATION</b>   |                          |
| <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> |                          |
| <b>Apparent Cause:</b>  | G7 - Incorrect Operation |
| <b>G1 - Corrosion Failure</b> – only one sub-cause can be picked from shaded left-hand column   |                          |
| <b>Corrosion Failure Sub-Cause:</b>   |                          |
| <b>- If External Corrosion:</b>   |                          |
| 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:    |
| <b>- If Internal Corrosion:</b>   |                          |
| 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?   |                          |  |
| <b>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.</b>       |                          |  |
| 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:           |  |
| <b>G2 – Natural Force Damage – only one sub-cause can be picked from shaded left-handed column</b>   |                          |  |
| <b>Natural Force Damage – Sub-Cause:</b>   |                          |  |
| <b>- If Earth Movement, NOT due to Heavy Rains/Floods:</b>   |                          |  |
| 1. Specify:  |                          |  |
|  | - If Other, Specify:     |  |
| <b>- If Heavy Rains/Floods:</b>  |                          |  |
| 2. Specify:  |                          |  |
|  | - If Other, Specify:     |  |
| <b>- If Lightning:</b>   |                          |  |
| 3. Specify:  |                          |  |
| <b>- If Temperature:</b>   |                          |  |
| 4. Specify:  |                          |  |
|  | - If Other, Specify:     |  |
| <b>- If Other Natural Force Damage:</b>  |                          |  |
| 5. Describe:   |                          |  |
| <b>Complete the following if any Natural Force Damage sub-cause is selected.</b>   |                          |  |
| 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:     |  |
| <b>G3 – Excavation Damage – only one sub-cause can be picked from shaded left-hand column</b>  |                          |  |
| <b>Excavation Damage – Sub-Cause:</b>  |                          |  |
| <b>- 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.</b> |                          |  |
| 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:           |  |
| <b>Complete the following if Excavation Damage by Third Party is selected.</b>   |                          |  |
| 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  |  |
| <b>Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.</b>   |  |
| 4. Do you want PHMSA to upload the following information to CGA-DIRT ( <a href="http://www.cga-dirt.com">www.cga-dirt.com</a> )?   |  |
| 5. Right-of-Way where event occurred ( <i>select all that apply</i> ):   |  |
| - 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 ( <i>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</i> ): |  |
| - 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:   |  |
| <b>G4 - Other Outside Force Damage - only one sub-cause can be selected from the shaded left-hand column</b>   |  |
| <b>Other Outside Force Damage – Sub-Cause:</b>   |  |
| <b>- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:</b>  |  |
| 1. Vehicle/Equipment operated by:  |  |
| <b>- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:</b>  |  |
| 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:   |  |
| <b>- 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.</b>                   |  |
| 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):  |  |
| <b>- If Intentional Damage:</b>  |  |
| 5. Specify:  |  |
| - If Other, Specify:   |  |
| <b>- If Other Outside Force Damage:</b>  |  |
| 6. Describe:   |  |



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

|   |                              |
|---|------------------------------|
| <b>Pipe, Weld or Joint Failure – Sub-Cause:</b>   |                              |
| <b>- If Body of Pipe:</b>   |                              |
| 1. Specify:   |                              |
|   | - If Other, Describe:        |
| <b>- If Butt Weld:</b>  |                              |
| 2. Specify:   |                              |
|   | - If Other, Describe:        |
| <b>- If Fillet Weld:</b>  |                              |
| 3. Specify:   |                              |
|   | - If Other, Describe:        |
| <b>- If Pipe Seam:</b>  |                              |
| 4. Specify:   |                              |
|   | - If Other, Describe:        |
| <b>- If Mechanical Fitting:</b>   |                              |
| 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:   |                              |
| <b>- If Compression Fitting:</b>  |                              |
| 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:    |
| <b>- If Fusion Joint:</b>   |                              |
| 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:         |
| <b>- If Other Pipe, Weld, or Joint Failure:</b>   |                              |
| 23. Describe:   |                              |

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

|   |   |
|---|---|
|   | powered tool to tighten up the bolts while gas was leaking to the atmosphere. |
| <b>Complete the following if any Incorrect Operation sub-cause is selected.</b>   |   |
| 2. Was this Incident related to: (select all that apply)  |   |
| - Inadequate procedure  |   |
| - No procedure established  |   |
| - Failure to follow procedure   | Yes   |
| - Other   |   |
| - If Other, Describe:   |   |
| 3. What category type was the activity that caused the Incident:  | Non-routine operating conditions (abnormal operations or emergencies)         |
| 4. Was the task(s) that led to the Incident identified as a covered task in your Operator Qualification Program?  | Yes   |
| 4a. If Yes, were the individuals performing the task(s) qualified for the task(s)?  | Yes, they were qualified for the task(s)                                      |
| <b>G8 - Other Incident Cause</b> - only one sub-cause can be selected from the shaded left-hand column  |   |
| <b>Other Incident Cause -- Sub-Cause:</b>   |   |
| <b>- If Miscellaneous:</b>  |   |
| 1. Describe:  |   |
| <b>- If Unknown:</b>  |   |
| 2. Specify:   |   |
| <b>PART H - NARRATIVE DESCRIPTION OF THE INCIDENT</b>   |   |
| <p>Received an odor complaint on January 28th 2016 at 3AM from Mason County Kentucky Emergency Dispatch that a customer had reported the smell of natural gas at or near 5040 Main Street Mayslick Kentucky. After two City of Flemingsburg natural gas employees Danny Shroust and Colby McCloud responded they made the determination that the leak was not an emergency and no threat to loss of life or any structure would occur and it should be fixed when it became daylight that same day. At approximately 8AM on January 28th 2016 three different City of Flemingsburg natural gas employees Coty Hunt, Mike Brown and Scotty Masters was assigned to dig out and repair the leak at or near 5040 Main Street Mayslick Kentucky, the said three employees arrived on the job site of the leak at approximately 9AM. The leak was pinpointed by a natural gas leak detector above ground and then excavating was started, once the four inch main was located and had been exposed it was discovered that a one inch service line saddle attached to the four inch main was leaking around a seal apparently. One employee Mike Brown tightened the four bolts on the saddle to try to stop the escaping natural gas but it did not stop the leak. After this attempt employee Coty Hunt called from his cell phone to Superintendent Joe Dunaway to explain to him what they had discovered and wanted to know what steps should be taken now, the Superintendent instructed to loosen the bolts up on the saddle and then attempt to tighten the bolts once again as tight as they could get them, Coty Hunt agreed to do so and said he would call back if it didn't work. Coty Hunt relayed to Mike Brown what the Superintendent had explained to him to do and then Mike Brown attempted to stop the escaping natural gas but this failed to stop the leak. Coty Hunt again called from his cell phone to Superintendent Joe Dunaway to explain to him what they tried but had failed to stop the leak, the Superintendent explained to Coty Hunt remove the saddle which would expose a hole in the four inch main, place a temporary full circle repair clamp over the hole to stop the escaping natural gas, go either upstream or downstream of the clamp and install a new saddle to install the one inch service line back up and then we would call a sub-contractor to come in and repair the hole that we placed the temporary full circle clamp over. Coty Hunt then explained to employees Mike Brown and Scotty Masters. Coty Hunt told Scotty Masters to go back to the Flemingsburg Distribution Center and get everything that was needed to install the full circle repair clamp and the saddle also to get all the tools and parts needed while Mike Brown and himself stay at the leak. Scotty Masters then returned with what he thought was everything that was needed to repair the leak, Coty Hunt and Scotty Masters unloaded the tools and parts and then began handing Mike Brown the tools and parts, Scotty Masters had brought back a combustible gas powered generator with an electric impact wrench to help with the installation of the full circle repair clamp. Employee Mike Brown removed the saddle from the four inch main while natural gas was escaping and placed the four inch repair clamp over the hole, the generator was running by this time and the electric impact wrench was plugged in and handed to Mike Brown to tighten up the bolts on the clamp, he tightened the bolts but natural gas was still escaping. Coty Hunt called from his cell phone to Superintendent Joe Dunaway to explain to him what had happened to this point and the gas was still leaking, the Superintendent instructed to remove the full circle repair clamp and to spray with soapy water and run a rasp/file over the hole to make sure that there wasn't any rough edges and the replace the full circle repair clamp back over the hole and tighten the bolts as tight as you could get them. Coty Hunt relayed to Mike Brown what the Superintendent had explained to him to do and then Mike Brown removed</p> |   |
| <b>PART I - PREPARER AND AUTHORIZED SIGNATURE</b>   |   |
| 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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called the City Clerk and his wife to explain to them what had happened and where he was going, he also called his hair dresser to get a hair appointment because his hair had been singed. When Mike Brown walked into the Fleming County Hospital emergency room he began having difficulty breathing, they gave him pain medicine and air lifted him to the University of Kentucky Hospital in Lexington Kentucky, he stayed overnight for observation and was released the next morning January 29<sup>th</sup> 2016. He had suffered from flash burns and later discovered broken teeth from hitting himself in the mouth with the impact wrench while it was in his hand when the arc flash occurred. The determination is the flash arc was caused by an electrical powered tool used by Mike Brown to tighten up the bolts while natural gas was escaping to the atmosphere and it caused an electrical arc which caused the flash. Additionally there was no post-accident drug /alcohol test conducted of any kind on the three employees involved, at the time of the incident it was overlooked, the focus was on the injured employee and this was the first incident that had ever occurred for the City of Flemingsburg since it began over 55 years ago, it was a complete oversight and never intentionally not completed.