

RECEIVED

JUL 15 2019

PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CITY OF AUGUSTA- ALLEGED)	
FAILURE TO COMPLY WITH KRS)	CASE NO.
278.495 AND 49 C.F.R. PARTS 191 AND 192)	2019-00188

RESPONSE

Comes now the City of Augusta, and hereby files its Written Response to the Alleged Violations set out in numerical paragraphs 1 through 11 of the Commission Order dated June 27th, 2019, establishing this investigatory proceeding. The City of Augusta reserves the right to amend and/or supplement this Response before or at the hearing on August 20th, 2019, if needed.

Response to #1

At the time of the periodic inspection of the Commission Staff (Staff) of the municipal gas system (gas system) of the City of Augusta (Augusta) on September 5-7, 2018, Augusta admits that it did not have detailed records regarding the installation and pressure test of new service line. Augusta hereby attaches a copy of such records to this Response as Exhibit 1.a.

At the time of the periodic inspection of Staff of the gas system of Augusta on September 5-7, 2018, Augusta admits that it did not have detailed records concerning installation of the excess flow valves (EFV). Augusta hereby attaches a copy of such records to this Response as Exhibit 1.b.

At the time of the periodic inspection of the Staff of the gas system of Augusta on September 5-7, 2018, Augusta admits that it did not have detailed records concerning

installation of any leaks and repairs of pipe. Augusta has attached a copy of such records since the inspection to this Response as Exhibit 1.c.

At the time of the periodic inspection of the Staff of the gas system of Augusta on September 5-7, 2018, Augusta admits that it did not have detailed records concerning corrosion inspections. Augusta has attached a copy of such records since the inspection to this Response as Exhibit 1.d.

Response to #2

Per regulations, staff training was conducted on March 4th, 2019 wherein appropriate personnel were trained to assure that they are familiar with emergency training procedures including those emergency procedures that have been updated in the manual containing the emergency plan. Evidence of such training is attached hereto as Exhibit 2.

Response to #3

Augusta admits that a leakage survey in the business district should have been conducted in 2017 and was not conducted until March 7th and March 8th of 2018. (Augusta contracted with Utility Safety & Design Inc. for such survey and incurred \$2634.00 in expenses related to such survey.) Please find a copy of the 2018 leakage survey attached as Exhibit 3.a. and a copy of the invoice for same attached as Exhibit 3.b. Utility Safety & Design Inc. conducted the 2019 leakage survey in the business district on April 16th and 17th 2019, at a cost of \$3567.80, and any needed repairs have been completed. Please find a copy of the 2019 leakage survey report, a copy of the repairs that were made as a result of such survey, and a copy of the invoice for the repairs,

attached as Exhibit 3.c. (Augusta has not yet received the invoice for the 2019 leakage survey.)

Response to #4

Augusta admits it did not conduct an inspection of all critical valves in 2016. The inspection records of all critical valves of the January 10th and January 12th, 2019 critical valve inspection are attached hereto as Exhibit 4.

Response to #5

Augusta admits it did not timely address the temporary clamp repair made on Wagel Road on March 27th, 2018, but such permanent repair was made on October 24th, 2018. A record (work order form) and photographs are attached hereto as Exhibit 5.

Response to #6

Augusta admits that at the time of the staff inspection it did not have an individual who had been re-qualified or qualified to conduct the critical test of pipe-to-soil readings. All Augusta gas personnel are now re-qualified or qualified to conduct pipe-to-soil inspections. Records of such operator qualifications are attached hereto as Exhibit 6.

Response to #7

Since Staff's inspection of Augusta's gas system, Augusta has provided training on indicators of probable drug use to supervisory personnel responsible for determining whether an employee must be drug tested based on a reasonable suspicion as follows: Please see attached Exhibit 7 as evidence of such training.

Response to #8

Augusta admits it did not timely submit its annual report on DOT Form PHMSA F-7100.1.1. (Such annual report was submitted April 9th, 2018.) Augusta's 2019 annual

report on DOT Form PHMSA F-7100.1.1. was submitted on March 1st, 2019. Please see attached Exhibit 8.

Response to #9

Augusta's operation and maintenance plan has been updated since Staff's inspection and should now meet all of the requirements of 49 CFR §192.605. Please see attached Exhibit 9.

Response to #10

Augusta's emergency plan has been updated since Staff's inspection and should now meet all of the requirements of 49 CFR §192.615. Please see attached Exhibit 10.

Response to #11

Since Staff's inspection, Augusta contracted with Utility Safety and Design, Inc. at a cost of \$5298.74 to make modifications to all four of its pressure regulator stations which are now all configured to allow for proper testing of each regulator's lock-up mechanism. Please see attached Exhibit 11, which consists of a Letter of Proposal for such modifications, and the post-repair inspection of the pressure regulator stations. (Augusta has not yet received the actual invoice for these repairs.)

Wherefore, the City of Augusta respectfully submits this Written Response as directed by the Commission's June 27th. 2019 Order.

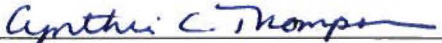
Respectfully Submitted,



Cynthia C. Thompson
Legal Counsel, City of Augusta
202 E. Riverside Drive
Augusta, Kentucky 41002
ccthompsonatty@yahoo.com
Tel.: (606) 756-2663
Fax.: (606) 756-2664

CERTIFICATE OF SERVICE

This is to certify that on this the 12th of July, 2019, an original and ten copies were mailed to the Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602-0615.



Cynthia C. Thompson
Legal Counsel, City of Augusta

EXHIBIT 1.a

Augusta Gas Service Work Order

Work Type:

Location/Address:

Facility Classification:

Leak Information

Date Discovered:

How Discovered:

Reported To:

Leak Grade:

CGI Used?

Percentage of Gas(%Gas in Air):

Graded By:

Description of Leak:

Cause of Leak:

Corrosion

- Atmospheric
- External
- Internal

Incorrect Operations

- Human Error
- Ineffective Procedures

Other Outside Force

- External Loading
- Fire/Explosion
- Vandalism
- Vehicle
- Other

Dig In

Information of Excavator

Was 811 Called:

Natural Forces

- Earthquake
- Earth/Rock Movement
- Flood
- Frost Heave
- Landslide
- Lightning
- Tornado
- Washout
- Other

Equipment Failure

- Excess Flow Valve
- Filter
- Flow/Pressure Controller
- Meter Casing
- Regulator/Relief Valve
- Threads
- Valve
- Other

Material and Welds

- Flange
- Mechanical Fitting
- Pipe
- Plastic Fusion Coupling
- Plastic Dresser
- Plastic to Steel Transition
- Screw Fitting
- Tap Tee
- Workmanship Defect
- Other

Explain Other

Pipe Information

Pipe Size: IN

Pipe Material:

Coating:

Pipe Condition:

EFV

Corrosion Information

Cathodic Protection:

Pipe to Soil Reading:

Wall Thickness:

Coupons Taken:

External Condition:

Pit Depth:

Internal Condition:

Pit Depth:

Anodes Installed:

Anode type:

Repair Coating 1:

Repair Coating 2:

Depth of Cover: Feet

Inches

Soil Condition:

Moisture:

Soil Packing:

Repair Information

Repair Method:

Date Repaired:

Repaired By:

Description of Repair:

Test Information

Length of Pipe FT

Test Type:

Test Medium:

X-Ray(STEEL):

Test Start Date/Time:

Pressure at Start: lbs

Pressure Loss:

Operating Pressure: lbs

Test End Date/Time:

Pressure at End: lbs

Amount of Loss lbs

Reason for Loss:

Corrections Made:

Other

Other Information:

Cleared By:

Date:

EXHIBIT 1.b

Augusta Gas Service Work Order

Work Type:

Location/Address:

Facility Classification:

Leak Information

Date Discovered: How Discovered: Reported To:

Leak Grade: CGI Used? Percentage of Gas(%Gas in Air): Graded By:

Description of Leak:

Cause of Leak:

Corrosion

- Atmospheric
- External
- Internal

Incorrect Operations

- Human Error
- Ineffective Procedures

Other Outside Force

- External Loading
- Fire/Explosion
- Vandalism
- Vehicle
- Other

Dig In

Information of Excavator

Natural Forces

- Earthquake
- Earth/Rock Movement
- Flood
- Frost Heave
- Landslide
- Lightning
- Tornado
- Washout
- Other

Equipment Failure

- Excess Flow Valve
- Filter
- Flow/Pressure Controller
- Meter Casing
- Regulator/Relief Valve
- Threads
- Valve
- Other

Material and Welds

- Flange
- Mechanical Fitting
- Pipe
- Plastic Fusion Coupling
- Plastic Dresser
- Plastic to Steel Transition
- Screw Fitting
- Tap Tee
- Workmanship Defect
- Other

Was 811 Called:

Explain Other

Pipe Information

Pipe Size: IN Pipe Material: Coating: Pipe Condition: EFV

Corrosion Information

Cathodic Protection: Pipe to Soil Reading: V Wall Thickness: IN Coupons Taken:

External Condition: Pit Depth: IN Internal Condition: Pit Depth: IN

Anodes Installed: Anode type: Repair Coating 1: Repair Coating 2:

Depth of Cover: Feet Inches Soil Condition: Moisture: Soil Packing:

Repair Information

Repair Method: Date Repaired: Repaired By:

Description of Repair:

Test Information

Length of Pipe FT Test Type: Test Medium: X-Ray(STEEL):

Test Start Date/Time: Pressure at Start: lbs Pressure Loss: lbs Operating Pressure: lbs

Test End Date/Time: Pressure at End: lbs Amount of Loss lbs

Reason for Loss: Corrections Made:

Other

Other Information:

Cleared By:

Date:

EXHIBIT 1.c

Augusta Gas Service Work Order

Work Type:

Location/Address:

Facility Classification:

Leak Information

Date Discovered:

How Discovered:

Reported To:

Leak Grade:

CGI Used? Yes

Percentage of Gas(%Gas in Air):

Graded By:

Description of Leak:

Cause of Leak:

Corrosion

- Atmospheric
- External
- Internal

Incorrect Operations

- Human Error
- Ineffective Procedures

Other Outside Force

- External Loading
- Fire/Explosion
- Vandalism
- Vehicle
- Other

Dig In

Information of Excavator

Was 811 Called:

Natural Forces

- Earthquake
- Earth/Rock Movement
- Flood
- Frost Heave
- Landslide
- Lightning
- Tornado
- Washout
- Other

Equipment Failure

- Excess Flow Valve
- Filter
- Flow/Pressure Controller
- Meter Casing
- Regulator/Relief Valve
- Threads
- Valve
- Other

Material and Welds

- Flange
- Mechanical Fitting
- Pipe
- Plastic Fusion Coupling
- Plastic Dresser
- Plastic to Steel Transition
- Screw Fitting
- Tap Tee
- Workmanship Defect
- Other

Explain Other

Pipe Information

Pipe Size: IN

Pipe Material:

Coating:

Pipe Condition: EFV

Corrosion Information

Cathodic Protection:

Pipe to Soil Reading: V

Wall Thickness: IN

Coupons Taken:

External Condition:

Pit Depth: IN

Internal Condition:

Pit Depth: IN

Anodes Installed:

Anode type:

Repair Coating 1:

Repair Coating 2:

Depth of Cover: Feet Inches

Soil Condition:

Moisture:

Soil Packing:

Repair Information

Repair Method:

Date Repaired:

Repaired By:

Description of Repair:

Test Information

Length of Pipe FT

Test Type:

Test Medium:

X-Ray(STEEL):

Test Start Date/Time:

Pressure at Start: lbs

Pressure Loss:

Operating Pressure: lbs

Test End Date/Time:

Pressure at End: lbs

Amount of Loss lbs

Reason for Loss:

Corrections Made:

Other

Other Information:

Cleared By:

Date:

EXHIBIT 1.d

1.4

PATROLLING OF DISTRIBUTION SYSTEM

Period Covered: Began 2-28-19 Ended 2-28-19
Areas Covered: _____

Map References: METER BOOK-2

Leakage Indications Discovered (Describe locations and indications, such as condition of vegetation) N/A

Leakage Indications Reported to: N/A
Construction Activity Along Areas: _____

Describe any unusual conditions at highway and railroad crossings: N/A

Other factors noted which could affect present or future safety or operation of gas system: N/A

Follow-Up (repairs, maintenance or tests resulting from this inspection): N/A

COMMENTS: _____

No. of persons in patrol party: _____

Signature of person in charge of patrol party:

[Signature]
Date: _____

PATROLLING OF DISTRIBUTION SYSTEM

Period Covered: Began 2-28-19 Ended 2-28-19
Areas Covered: _____

BOOK 1

Map References: _____

Leakage Indications Discovered (Describe locations and indications, such as condition of vegetation) _____

Now

Leakage Indications Reported to: _____
Construction Activity Along Areas: Now

Describe any unusual conditions at highway and railroad crossings: _____

Now

Other factors noted which could affect present or future safety or operation of gas system: _____

Now

Follow-Up (repairs, maintenance or tests resulting from this inspection): _____

COMMENTS: _____

Now

No. of persons in patrol party: _____

Signature of person in charge of patrol party:

Dark

Date: 2-28-19

Book 3

PATROLLING OF DISTRIBUTION SYSTEM

Period Covered: Began 2-27-19 Ended 2-27-19
Areas Covered: West of East Second West and East Second
Main St Frankfort St.

Map References: _____

Leakage Indications Discovered (Describe locations and indications, such as condition of vegetation) _____
_____ None

Leakage Indications Reported to: _____
Construction Activity Along Areas: None

Describe any unusual conditions at highway and railroad crossings: _____

Other factors noted which could affect present or future safety or operation of gas system: None

Follow-Up (repairs, maintenance or tests resulting from this inspection): _____

COMMENTS: None

No. of persons in patrol party: 1

Signature of person in charge of patrol party:
[Signature]
Date: 2-27-19

PATROLLING OF DISTRIBUTION SYSTEM

Period Covered: Began 2-27-19 Ended 2-27-19
Areas Covered: _____

Map References: BOOK 4

Leakage Indications Discovered (Describe locations and indications, such as condition of vegetation) ODOR SHUT
METER OFF DUE TO GAS INSIDE RESIDENCE
LOCKED METER

Leakage Indications Reported to: N/A
Construction Activity Along Areas: _____

Describe any unusual conditions at highway and railroad crossings: N/A

Other factors noted which could affect present or future safety or operation of gas system: N/A

Follow-Up (repairs, maintenance or tests resulting from this inspection): N/A

COMMENTS: N/A

No. of persons in patrol party: _____

Signature of person in charge of patrol party:
Ty Archibald
Date: 2-27-19

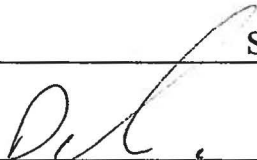
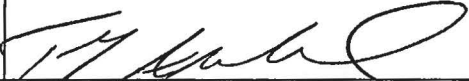

EXHIBIT 2

City of Augusta

Natural Gas System

Employee Training on Emergency Procedures

March 4, 2019

Print Name	Signature
DARIN BLEVINS	
TROY ARCHIBALD	
DERRICK BUCK	

49 CFR 192.615(b)(2) Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective.

EXHIBIT 3.a



Leakage Survey Report - 1302

Leakage Survey Summary

City/Company:	City of Augusta/Kentucky
Technician(s):	Daniel Jefferson, USDI & Darrin Blevins, City of Augusta
Beginning Date:	Wednesday, March 07, 2018
Ending Date:	Thursday, March 08, 2018

Total Days of Inspection:	2
Main Inspection Days:	1
Service Line Inspection Days:	1

Mains

Total Number of Leaks Recorded:	3
Below Ground:	2
Above Ground:	1

Services

Total Number of Leaks Recorded:	3
Below Ground:	1
Above Ground:	2

Notes:

1. Above ground meter set leaks will not be reportable on Gas Distribution Annual Report Form (PHMSA F7100.0-1) if they can be eliminated by lubrication, adjustment, or tightening.
2. Customer-owned piping or piping from the outlet side of the meter to the building wall was surveyed.

Description of System Surveyed:

The entire system was surveyed, including the Business District, residential sections, and rural sections. The survey was conducted using a Heath Consultants Remote Methane Leak Detector, Southern Cross Flame Ionization unit, and a Sensit Gold combustible gas indicator. Leak No.4 at 101 Frankfort St. was repaired by City of Augusta personnel during the second day of the survey (03-08-2018).

LEAK CLASSIFICATION AND ACTION CRITERIA - GRADE 1

Grade Definition	Examples	Action Criteria
<p>A leak that represents an existing or probable hazard to persons or property, and requires immediate repair or continuous action until the conditions are no longer hazardous. See §192.703(c).</p>	<ol style="list-style-type: none"> 1. Any leak which, in the judgment of operating personnel at the scene, is regarded as an immediate hazard. 2. Escaping gas that has ignited. 3. Any indication of gas which has migrated into or under a building, or into a tunnel. 4. Any reading at the outside wall of a building, or where gas would likely migrate to an outside wall of a building. 5. Any reading of 80% LEL, or greater, in a confined space. 6. Any reading of 80% LEL, or greater in small substructures (other than gas associated substructures) from which gas would likely migrate to the outside wall of a building. 7. Any leak that can be seen, heard, or felt, and which is in a location that may endanger the general public or property. 	<p>Requires prompt action* to protect life and property, and continuous action until the conditions are no longer hazardous</p> <p>* The prompt action in some instances may require one or more of the following:</p> <ol style="list-style-type: none"> a. Implementation of emergency plan (§192.615). b. Evacuating premises. c. Blocking off an area. d. Rerouting traffic. e. Eliminating sources of ignition. f. Venting the area by removing manhole covers, barholing, installing vent holes, or other means. g. Stopping the flow of gas by closing valves or other means. h. Notifying police and fire departments.

LEAK CLASSIFICATION AND ACTION CRITERIA – GRADE 2		
Grade Definition	Examples	Action Criteria
<p>A leak that is recognized as being non-hazardous at the time of detection, but justifies scheduled repair based on probable future hazard.</p>	<p>A. Leaks Requiring Action Ahead of Ground Freezing or Other Adverse Changes in Venting Conditions. Any leak which, under frozen or other adverse soil conditions, would likely migrate to the outside wall of a building.</p> <p>B. Leaks Requiring Action Within Six Months</p> <ol style="list-style-type: none"> 1. Any reading of 40% LEL, or greater, under a sidewalk in a wall-to-wall paved area that does not qualify as a Grade 1 leak. 2. Any reading of 100% LEL, or greater, under a street in a wall-to-wall paved area that has significant gas migration and does not qualify as a Grade 1 leak. 3. Any reading less than 80% LEL in small substructures (other than gas associated substructures) from which gas would likely migrate creating a probable future hazard. 4. Any reading between 20% LEL and 80% LEL in a confined space. 5. Any reading on a pipeline operating at 30 percent SMYS, or greater, in a class 3 or 4 location, which does not qualify as a Grade 1 leak. 6. Any reading of 80% LEL, or greater, in gas associated substructures. 7. Any leak which, in the judgment of operating personnel at the scene, is of sufficient magnitude to justify scheduled repair. 	<p>Leaks should be repaired or cleared within one calendar year, but no later than 15 months from the date the leak was reported. In determining the repair priority, criteria such as the following should be considered.</p> <ol style="list-style-type: none"> a. Amount and migration of gas. b. Proximity of gas to buildings and subsurface structures. c. Extent of pavement. d. Soil type, and soil conditions, such as frost cap, moisture and natural venting. <p>Grade 2 leaks should be reevaluated at least once every six months until cleared. The frequency of reevaluation should be determined by the location and magnitude of the leakage condition.</p>

LEAK CLASSIFICATION AND ACTION CRITERIA – GRADE 3		
Grade Definition	Examples	Action Criteria
A leak that is nonhazardous at the time of detection and can be reasonably expected to remain non-hazardous.	<p>Leaks Requiring Reevaluation at Periodic Intervals</p> <ol style="list-style-type: none"> 1. Any reading of less than 80% LEL in small gas associated substructures. 2. Any reading under a street in areas without wall-to-wall paving where it is unlikely the gas could migrate to the outside wall of a building. 3. Any reading of less than 20% LEL in a confined space. 	These leaks should be reevaluated during the next scheduled survey, or within 15 months of the date reported, whichever occurs first, until the leak is regraded or no longer results in a reading.

EXHIBIT 3.b



Utility Safety and Design Inc.

PO Box 276
1927 Miller Drive
Olney, IL 62450
6183925502

INVOICE

Number: IN20183141
Page: 1
Date: 7/31/2018

36

Sold To: CITY OF AUGUSTA
PO BOX 85
AUGUSTA, KY 41002

Attn: GAS DEPARTMENT

Reference - P.O. #	Customer No.	Salesperson	Ship Via	Terms Code
	AUGUSTA	DH		NET30

Item No.	Description/Comments	Quantity	UOM	Unit Price	Amount
LABOR	Pre-Inspection Records Audit & disc w/ [P, DIMP, CP, LEAK, ETC	9.00	HOUR	125.000000	1,125.00
MATERIAL	MILEAGE	381.00000	EACH	0.680000	259.08
	CODECOMP SubTotal				1,384.08
LABOR	Regulator Inspection/Documentation INSPECTION SubTotal	10.00	HOUR	125.000000	1,250.00
					1,250.00
2018-AUGUSTKY Total					2,634.08
	Due Date Amount Due				
	8/30/2018 2,634.08				
	<i>Leak Survey</i>				

Remit To:
Utility Safety and Design Inc.
PO Box 276
1927 Miller Drive
Olney 62450

Subtotal before taxes	2,634.08
Total taxes	0.00
Total amount	2,634.08
Amount due	2,634.08

Thank you for the opportunity to serve you.

EXHIBIT 3.c



Leakage Survey Report - 1302

Leakage Survey Summary

City/Company:	Augusta, KY / City of Augusta
Technician(s):	Daniel Jefferson
Beginning Date:	Tuesday, April 16, 2019
Ending Date:	Thursday, April 18, 2019

Total Days of Inspection:	2.5
Main Inspection Days:	1.25
Service Line Inspection Days:	1.25

Mains

Total Number of Leaks Recorded:	5
Below Ground:	5
Above Ground:	0

Services

Total Number of Leaks Recorded:	2
Below Ground:	1
Above Ground:	1

Notes:

1. Above ground meter set leaks will not be reportable on Gas Distribution Annual Report Form (PHMSA F7100.0-1) if they can be eliminated by lubrication, adjustment, or tightening.
2. Customer-owned piping or piping from the outlet side of the meter to the building wall was surveyed.

Description of System Surveyed:

04/16/2019 - Business district survey started. 04/17/2019 - Business district survey Completed, and also surveyed approximately .5 mile of 4" main between E Augusta Chatam Rd and regulator station on Heather Renee French BLVE (HWY 8). Also surveyed approximately .9 Mile of the "industrial park" line from Gillespie Ln to a point 500' north of the Dutch Ridge Rd Crossing. 04/18/2019 - Continued the "industrial park" line survey from point 500' north of the Dutch Ridge Rd Crossing along the pipeline route approximately 2 miles to the intersection of HWY 9 and HWY 19. Also surveyed the 4" steel main and services on Valley View Dr and Valley High Dr.

Leakage Survey Report - 1302

Leakage Survey - Leaks Found

City/Company:

Technician(s):

Date: Sheet: of

Daily Footage:

Leak Equipment SN:

No.	Address	Pressure	Class	Cover	Location & Remarks
1	207 Park St	I ▼	2 ▼	S ▼	Underground leak on 2" Main. Greatest barhole reading - 92% gas. Line was excavated to reveal corrosion in the area of the service line taps. Found on 04/16/2019
2	205 Park St	I ▼	2 ▼	S ▼	Underground leak on 2" Main. Greatest barhole reading - 87% gas. Found on 04/16/2019
3	205 Park St	I ▼	2 ▼	S ▼	Underground leak on service line to abandon building. Greatest barhole reading - 60% gas. Found on 04/16/2019
4	525 E 3rd St. Unit #3	I ▼	3 ▼	S ▼	Regulator vent leaking. Found on 04/16/2019
5	504 E 4th St	I ▼	2 ▼	S ▼	Underground leak likely on main at service tap. Greatest barhole reading - 42% Gas. Found on 04/16/2019
6	SW corner of Elizabeth St @ 2nd St	I ▼	2 ▼	S ▼	Underground leak on main. Greatest barhole reading - 37% Gas. Found on 04/17/2019
7	NW corner of Elizabeth St @ 2nd St	I ▼	2 ▼	S ▼	Underground leak on main. Greatest barhole reading - %40 Gas. Found on 04/17/2019



Utility Safety and Design Inc.

PO Box 276
1927 Miller Drive
Olney, IL 62450
6183925502

INVOICE

Number: IN20191947
Page: 1
Date: 4/30/2019

Sold To: CITY OF AUGUSTA
PO BOX 85
AUGUSTA, KY 41002
Attn: GAS DEPARTMENT

Table with 5 columns: Reference - P.O. #, Customer No., Salesperson, Ship Via, Terms Code. Values include AUGUSTA, DH, NET30.

Main invoice table with 6 columns: Item No., Description/Comments, Quantity, UOM, Unit Price, Amount. Lists various equipment and materials like MINI-EXCAVATOR, DIRECTIONAL BORING MACHINE, etc.

Continued on next page..



Utility Safety and Design Inc.

PO Box 276
1927 Miller Drive
Olney, IL 62450
6183925502

INVOICE

Number: IN20191947
Page: 2
Date: 4/30/2019

Sold To: CITY OF AUGUSTA
PO BOX 85
AUGUSTA, KY 41002

Attn: GAS DEPARTMENT

Reference - P.O. #	Customer No.	Salesperson	Ship Via	Terms Code
	AUGUSTA	DH		NET30

Item No.	Description/Comments	Quantity	UOM	Unit Price	Amount
MATERIAL	ELL 1" X 3/4" BLK THREADED ELL	1.00000	EACH	5.187500	5.19
MATERIAL	NIPPLE 1 X 10-1/2 BLK	1.00000	EACH	6.762500	6.76
MATERIAL	BELL REDUCER 1-1/2 X 1 THREADED	1.00000	EACH	8.532692	8.53
MATERIAL	EF COUPLING 2" IPS PE3408 BLACK	6.00000	EACH	9.965295	59.79
MATERIAL	NON-INS LOCKSTOP 3/4" GAS BALL VALVE	14.00000	EACH	18.362500	257.08
MATERIAL	TRANSITION 2" X 2" IPS WELD SDR11	2.00000	EACH	32.545000	65.09
MATERIAL	RISER 3/4" NPT X 1/2" CTS 30 X 24	14.00000	EACH	38.451548	538.32
MATERIAL	EFTT PERMASERT 2" IPS X 1/2" CTS I	14.00000	EACH	58.770833	822.79
MATERIAL	KEROTEST PE BALL VALVE 2" IPS YEL	2.00000	EACH	77.156250	154.31
MATERIAL	LINE STOPPER 2" LOW PRESSURE	2.00000	EACH	86.487500	172.98
MATERIAL	VALVE BOX LONG 39-60" RVB 5-245-3	2.00000	EACH	92.479463	184.96
MATERIAL	Travel/Overnight Expense	9.00000	EACH	200.000000	1,800.00
OTHER		1.00000	EACH	0.000000	0.00
OTHER		1.00000	EACH	0.000000	0.00
OTHER		1.00000	EACH	0.000000	0.00

Continued on next page..



Utility Safety and Design Inc.

PO Box 276
1927 Miller Drive
Olney, IL 62450
6183925502

INVOICE

Number: IN20191947
Page: 3
Date: 4/30/2019

Sold To: CITY OF AUGUSTA
PO BOX 85
AUGUSTA, KY 41002

Attn: GAS DEPARTMENT

Reference - P.O. #	Customer No.	Salesperson	Ship Via	Terms Code
	AUGUSTA	DH		NET30

Item No.	Description/Comments	Quantity	UOM	Unit Price	Amount
OTHER		1.00000	EACH	0.000000	0.00
OTHER		1.00000	EACH	0.000000	0.00
OTHER		1.00000	EACH	0.000000	0.00
	20190249 SubTotal				24,619.38
2019-AUGUSTKY					24,619.38
Total					
	Due Date	Amount Due			
	5/30/2019	24,619.38			

Remit To:
Utility Safety and Design Inc.
PO Box 276
1927 Miller Drive
Olney 62450

Subtotal before taxes	24,619.38
Total taxes	0.00
Total amount	24,619.38
Amount due	24,619.38

Thank you for the opportunity to serve you.

EXHIBIT 4

EXHIBIT 5

Augusta Gas Service Work Order

Work Type:

Location/Address:

Facility Classification:

Leak Information

Date Discovered:

How Discovered:

Reported To:

Leak Grade:

CGI Used?

Percentage of Gas(%Gas in Air):

Graded By:

Description of Leak:

Cause of Leak:

Corrosion

- Atmospheric
- External
- Internal

Incorrect Operations

- Human Error
- Ineffective Procedures

Other Outside Force

- External Loading
- Fire/Explosion
- Vandalism
- Vehicle
- Other

Dig In

Information of Excavator

Was 811 Called:

Natural Forces

- Earthquake
- Earth/Rock Movement
- Flood
- Frost Heave
- Landslide
- Lightning
- Tornado
- Washout
- Other

Equipment Failure

- Excess Flow Valve
- Filter
- Flow/Pressure Controller
- Meter Casing
- Regulator/Relief Valve
- Threads
- Valve
- Other

Material and Welds

- Flange
- Mechanical Fitting
- Pipe
- Plastic Fusion Coupling
- Plastic Dresser
- Plastic to Steel Transition
- Screw Fitting
- Tap Tee
- Workmanship Defect
- Other

Explain Other:

Pipe Information

Pipe Size: IN

Pipe Material:

Coating:

Pipe Condition: EFV

Corrosion Information

Cathodic Protection:

Pipe to Soil Reading:

Wall Thickness: IN

Coupons Taken:

External Condition:

Pit Depth: IN

Internal Condition:

Pit Depth: IN

Anodes Installed: Anode type:

Repair Coating 1: Repair Coating 2:

Depth of Cover: Feet Inches

Soil Condition: Moisture: Soil Packing:

Repair Information

Repair Method:

Date Repaired:

Repaired By:

Description of Repair:

Test Information

Length of Pipe FT

Test Type:

Test Medium: X-Ray(STEEL):

Test Start Date/Time: Pressure at Start: lbs

Pressure Loss: Operating Pressure: lbs

Test End Date/Time: Pressure at End: lbs

Amount of Loss lbs

Reason for Loss:

Corrections Made:

Other

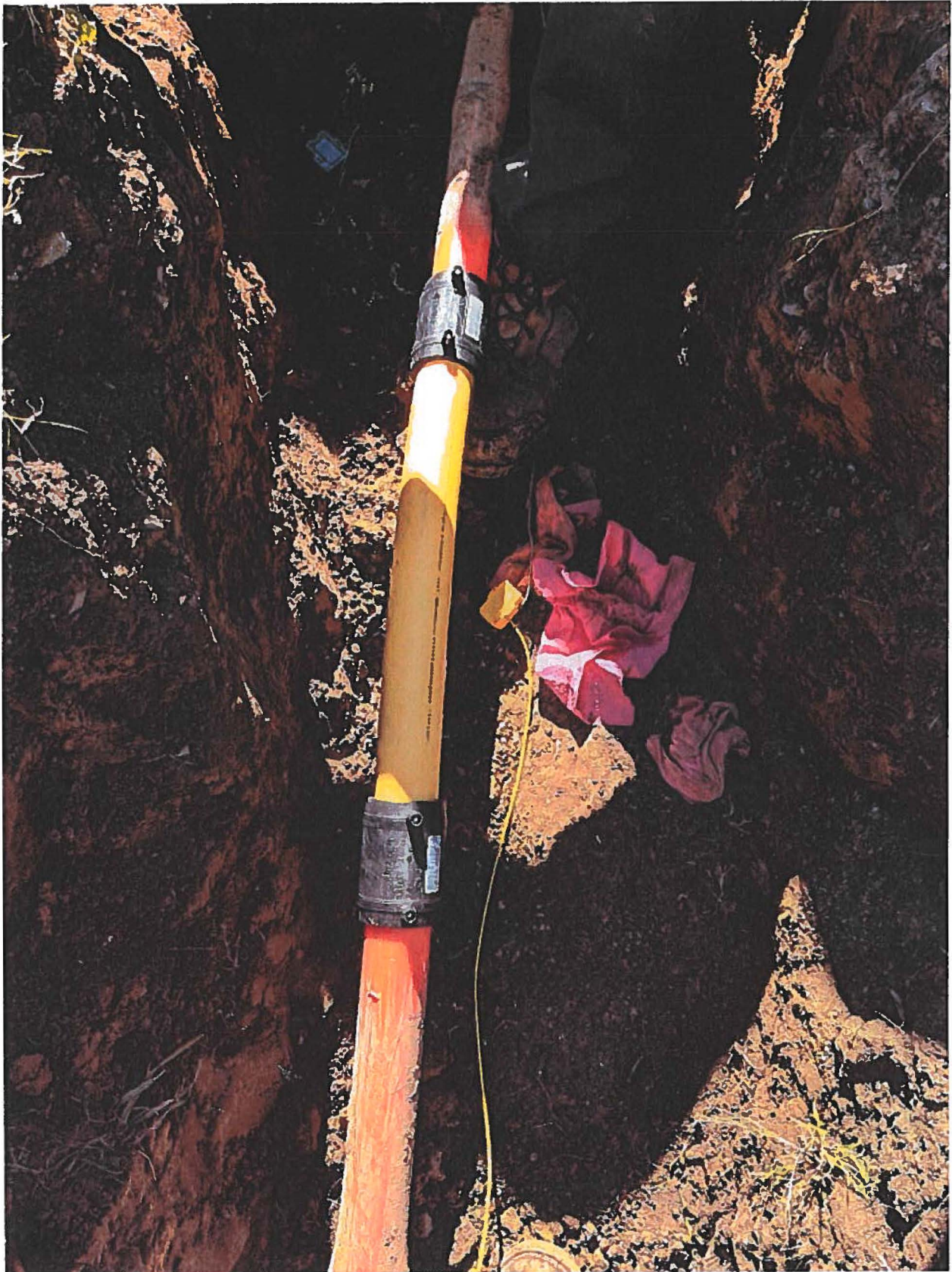
Other Information:

Cleared By:

Date:

0230 FEET 04/20/18 2245 001 0129 Made in the USA PE34030012300

Pipe Pressure Tested
@ 45 PSI. No pressure loss.



Permanent Repair on gas line

October 24, 2018





EXHIBIT 6

ARC RANDOLPH & ASSOCIATES, LLC

| A REGULATORY COMPLIANCE
AND TRAINING COMPANY

Exhibit 6

INVOICE

Date 12/4/20178
Invoice No. 1781

Bill to: City of Augusta
P.O. Box 85
Augusta, KY 41002
ATTN: Accounts Payable / Darian Blevins

Due 1/4/2019

Quantity	Description	Day Cost Unit	Total Cost
3 Days	"Operator Qualification" Classes Shared Cost w/Brooksville - on November 28 - 30, 2018 DOT 192 OQ Qualification Classes: Four Employees Discounted 50% Shared Cost "City of Brooksville"	\$ 1,095.00	\$ 3,285.00 \$ (1,642.50)
	#32 Total Individual OQ Qualifications		
4	F-1 OQ Books/Tests/Affidavits	\$ 55.00	\$ 220.00
4	F-2 OQ Books/Tests/Affidavits	\$ 55.00	\$ 220.00
4	L-2 OQ Books/Tests/Affidavits	\$ 55.00	\$ 220.00
4	M-8 OQ Books/Tests/Affidavits	\$ 55.00	\$ 220.00
4	M-10 OQ Books/Tests/Affidavits	\$ 55.00	\$ 220.00
4	L-3A OQ Books/Tests/Affidavits	\$ 55.00	\$ 220.00
4	I-1 OQ Books/Tests/Affidavits	\$ 55.00	\$ 220.00
4	I-11 OQ Books/Tests/Affidavits	\$ 55.00	\$ 220.00
	Instructor Travel / Postage / Copies (Shared Cost)		\$ 195.50
	Federal EIN: [REDACTED]		
Terms Payment Upon Receipt 1.5% per month after 30 days		Amount Due Amount Paid Balance Due	\$ 3,598.00

ARC
 INSTRUCTOR: WEBB

Official Transcript Request
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6.

Last Name	First Name	Company Name	Test Date	P/F	Instructor	Test Name	Skill
ARCHIBALD	TROY	CITY OF AUGUSTA	11/30/2018	P	WEBB	CF-1 Exam Join Plastic Pipe with Heat Fusion	CF-1 0751 SIM
ARCHIBALD	TROY	CITY OF AUGUSTA	11/29/2018	P	WEBB	CL-2 Exam Purge Pipelines (Small & Large Diameter)	CL-2 1651 SIM
ARCHIBALD	TROY	CITY OF AUGUSTA	11/30/2018	F	WEBB	CF-2 Exam Join Pipe with Mechanical Fittings	CF-2 0691,0701,0681,0711 SIM
ARCHIBALD	TROY	CITY OF AUGUSTA	11/30/2018	P	WEBB	CI-1 Exam Perform Pipe-to-Soil Potential Surveys on Effectively Coated Buried or Submerged Pipelines	CI-1 0001 SIM
ARCHIBALD	TROY	CITY OF AUGUSTA	11/30/2018	P	WEBB	CI-11 Exam Install Sacrificial Anodes and Test Stations	CI-11 0051,5071 SIM
ARCHIBALD	TROY	CITY OF AUGUSTA	11/29/2018	P	WEBB	CL-3a Exam Monitor Odorant Levels	CL-3A 1211 SIM
ARCHIBALD	TROY	CITY OF AUGUSTA	11/29/2018	P	WEBB	CM-10 Exam Abandon/Deactivate Gas Pipeline Facilities	CM-10 5081,5091,1201 SIM
ARCHIBALD	TROY	CITY OF AUGUSTA	11/29/2018	P	WEBB	CM-8 Exam Make Field Repairs on Gas Pipelines	CM-8 0201,0641,1041,1071,1141 SIM
BACH	DERRICK	CITY OF AUGUSTA	11/28/2018	P	WEBB	CF-1 Exam Join Plastic Pipe with Heat Fusion	CF-1 0751,0781 SIM
BACH	DERRICK	CITY OF AUGUSTA	11/29/2018	P	WEBB	CL-2 Exam Purge Pipelines (Small & Large Diameter)	CL-2 1651 SIM
BACH	DERRICK	CITY OF AUGUSTA	11/28/2018	P	WEBB	CF-2 Exam Join Pipe with Mechanical Fittings	CF-2 0691,0701,0681,0711 SIM
BACH	DERRICK	CITY OF AUGUSTA	11/30/2018	P	WEBB	CI-1 Exam Perform Pipe-to-Soil Potential Surveys on Effectively Coated Buried or Submerged Pipelines	CI-1 0001 SIM
BACH	DERRICK	CITY OF AUGUSTA	11/30/2018	P	WEBB	CI-11 Exam Install Sacrificial Anodes and Test Stations	CI-11 0051,5071 SIM
BACH	DERRICK	CITY OF AUGUSTA	11/29/2018	P	WEBB	CL-3a Exam Monitor Odorant Levels	CL-3A 1211 SIM
BACH	DERRICK	CITY OF AUGUSTA	11/29/2018	P	WEBB	CM-10 Exam Abandon/Deactivate Gas Pipeline Facilities	CM-10 5081,5091,1201 SIM
BACH	DERRICK	CITY OF AUGUSTA	11/29/2018	P	WEBB	CM-8 Exam Make Field Repairs on Gas Pipelines	CM-8 0201,0641,1041,1071,1141 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	11/28/2018	P	WEBB	CF-1 Exam Join Plastic Pipe with Heat Fusion	CF-1 0751,0781 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	11/29/2018	F	WEBB	CL-2 Exam Purge Pipelines (Small & Large Diameter)	CL-2 1651 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	11/28/2018	P	WEBB	CF-2 Exam Join Pipe with Mechanical Fittings	CF-2 0691,0701,0681,0711 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	11/30/2018	P	WEBB	CI-1 Exam Perform Pipe-to-Soil Potential Surveys on Effectively Coated Buried or Submerged Pipelines	CI-1 0001 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	11/30/2018	P	WEBB	CI-11 Exam Install Sacrificial Anodes and Test Stations	CI-11 0051,5071 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	11/29/2018	P	WEBB	CL-3a Exam Monitor Odorant Levels	CL-3A 1211 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	11/29/2018	P	WEBB	CM-10 Exam Abandon/Deactivate Gas Pipeline Facilities	CM-10 5081,5091,1201 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	11/29/2018	P	WEBB	CM-8 Exam Make Field Repairs on Gas Pipelines	CM-8 0201,0641,1041,1071,1141 SIM
PADGETT	DOUG	CITY OF AUGUSTA	11/28/2018	P	WEBB	CF-1 Exam Join Plastic Pipe with Heat Fusion	CF-1 0751,0781 SIM
PADGETT	DOUG	CITY OF AUGUSTA	11/29/2018	P	WEBB	CL-2 Exam Purge Pipelines (Small & Large Diameter)	CL-2 1651 SIM
PADGETT	DOUG	CITY OF AUGUSTA	11/28/2018	P	WEBB	CF-2 Exam Join Pipe with Mechanical Fittings	CF-2 0691,0701,0681,0711 SIM
PADGETT	DOUG	CITY OF AUGUSTA	11/30/2018	P	WEBB	CI-1 Exam Perform Pipe-to-Soil Potential Surveys on Effectively Coated Buried or Submerged Pipelines	CI-1 0001 SIM
PADGETT	DOUG	CITY OF AUGUSTA	11/30/2018	P	WEBB	CI-11 Exam Install Sacrificial Anodes and Test Stations	CI-11 0051,5071 SIM
PADGETT	DOUG	CITY OF AUGUSTA	11/29/2018	P	WEBB	CL-3a Exam Monitor Odorant Levels	CL-3A 1211 SIM
PADGETT	DOUG	CITY OF AUGUSTA	11/29/2018	P	WEBB	CM-10 Exam Abandon/Deactivate Gas Pipeline Facilities	CM-10 5081,5091,1201 SIM
PADGETT	DOUG	CITY OF AUGUSTA	11/29/2018	P	WEBB	CM-8 Exam Make Field Repairs on Gas Pipelines	CM-8 0201,0641,1041,1071,1141 SIM

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6

Last Name	First Name	Company Name	Test Date	P/F	Instructor	Test Name	Skill
ARCHIBALD	TROY	CITY OF AUGUSTA	02/05/2019	P	WINGATE	CF-2 Exam Join Pipe with Mechanical Fittings	CF-2 0691,0701,0681,0711 SIM
BLEVINS	DARIAN	CITY OF AUGUSTA	02/05/2019	P	WINGATE	CL-2 Exam Purge Pipelines (Small & Large Diameter)	CL-2 1651 SIM



EXHIBIT 7



"HISTORY on the river...AUGUSTA, my old Kentucky home."

March 1, 2019

To Whom It May Concern:

On March 1, 2019, Darinn Blevins completed training at the Augusta Police Department . Per CFR Part 199.113 (c), Darrin Blevins has completed the necessary training for supervisors regarding the detection of potential drug abuse and alcohol misuse. The minimum requirement of 60 minutes has been met.

If you have any questions please contact me at the number listed below.

Chief Matthew Jones

Chief of Police
MATTHEW JONES

219 MAIN STREET
P.O. BOX 85
AUGUSTA, KY 41002

phone
606-735-2700

fax
606-756-2185

email
mjones@augustaky.com

Equal Opportunity
Employer & Provider

EXHIBIT 8

8

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: 2137-0629
EXPIRATION DATE: 10/31/2021



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

Initial Date Submitted: 03/01/2019
Form Type: INITIAL
Date Submitted:

**ANNUAL REPORT FOR
CALENDAR YEAR 2018
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 2137-0629. Public reporting for this collection of information is estimated to be approximately 16 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

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 - OPERATOR INFORMATION (DOT use only) 20190236-37637

1. Name of Operator	AUGUSTA, CITY OF
2. LOCATION OF OFFICE (WHERE ADDITIONAL INFORMATION MAY BE OBTAINED)	
2a. Street Address	PO BOX 85
2b. City and County	AUGUSTA
2c. State	KY
2d. Zip Code	41002
3. OPERATOR'S 5 DIGIT IDENTIFICATION NUMBER	864
4. HEADQUARTERS NAME & ADDRESS	
4a. Street Address	219 MAIN ST ; PO BOX 85
4b. City and County	AUGUSTA
4c. State	KY
4d. Zip Code	41002
5. STATE IN WHICH SYSTEM OPERATES	KY
6. THIS REPORT PERTAINS TO THE FOLLOWING COMMODITY GROUP (Select Commodity Group based on the predominant gas carried and complete the report for that Commodity Group. File a separate report for each Commodity Group included in this OPID.)	
Natural Gas	
7. THIS REPORT PERTAINS TO THE FOLLOWING TYPE OF OPERATOR (Select Type of Operator based on the structure of the company included in this OPID for which this report is being submitted.):	
Municipal Owned	

PART B - SYSTEM DESCRIPTION

1.GENERAL	STEEL				PLASTIC	CAST/ WROUGHT IRON	DUCTILE IRON	COPPER	OTHER	RECONDITION ED CAST IRON	SYSTEM TOTAL
	UNPROTECTED		CATHODICALLY PROTECTED								
	BARE	COATED	BARE	COATED							
MILES OF MAIN	0	0	0	19	12	0	0	0	0	0	31
NO. OF SERVICES	0	0	0	275	176	0	0	0	0	0	451

2.MILES OF MAINS IN SYSTEM AT END OF YEAR											
MATERIAL	UNKNOWN	2" OR LESS	OVER 2" THRU 4"	OVER 4" THRU 8"	OVER 8" THRU 12"	OVER 12"	SYSTEM TOTALS				
STEEL	0	0	19	0	0	0	19				
DUCTILE IRON	0	0	0	0	0	0	0				
COPPER	0	0	0	0	0	0	0				
CAST/WROUGHT IRON	0	0	0	0	0	0	0				
PLASTIC PVC	0	0	0	0	0	0	0				
PLASTIC PE	0	5	7	0	0	0	12				
PLASTIC ABS	0	0	0	0	0	0	0				
PLASTIC OTHER	0	0	0	0	0	0	0				
OTHER	0	0	0	0	0	0	0				
RECONDITIONED CAST IRON	0	0	0	0	0	0	0				
TOTAL	0	5	26	0	0	0	31				
Describe Other Material:											
3.NUMBER OF SERVICES IN SYSTEM AT END OF YEAR					AVERAGE SERVICE LENGTH: 12						
MATERIAL	UNKNOWN	1" OR LESS	OVER 1" THRU 2"	OVER 2" THRU 4"	OVER 4" THRU 8"	OVER 8"	SYSTEM TOTALS				
STEEL	0	271	4	0	0	0	275				
DUCTILE IRON	0	0	0	0	0	0	0				
COPPER	0	0	0	0	0	0	0				
CAST/WROUGHT IRON	0	0	0	0	0	0	0				
PLASTIC PVC	0	0	0	0	0	0	0				
PLASTIC PE	0	176	0	0	0	0	176				
PLASTIC ABS	0	0	0	0	0	0	0				
PLASTIC OTHER	0	0	0	0	0	0	0				
OTHER	0	0	0	0	0	0	0				
RECONDITIONED CAST IRON	0	0	0	0	0	0	0				
TOTAL	0	447	4	0	0	0	451				
Describe Other Material:											
4.MILES OF MAIN AND NUMBER OF SERVICES BY DECADE OF INSTALLATION											
	UNKNOWN	PRE-1940	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	2010-2019	TOTAL

MILES OF MAIN	31	0	0	0	0	0	0	0	0	0	31
NUMBER OF SERVICES	451	0	0	0	0	0	0	0	0	0	451

PART C - TOTAL LEAKS AND HAZARDOUS LEAKS ELIMINATED/REPAIRED DURING THE YEAR

CAUSE OF LEAK	MAINS		SERVICES	
	TOTAL	HAZARDOUS	TOTAL	HAZARDOUS
CORROSION FAILURE			1	
NATURAL FORCE DAMAGE				
EXCAVATION DAMAGE				
OTHER OUTSIDE FORCE DAMAGE				
PIPE, WELD OR JOINT FAILURE				
EQUIPMENT FAILURE				
INCORRECT OPERATIONS				
OTHER CAUSE			1	

NUMBER OF KNOWN SYSTEM LEAKS AT END OF YEAR SCHEDULED FOR REPAIR : 1

PART D - EXCAVATION DAMAGE

1. TOTAL NUMBER OF EXCAVATION DAMAGES BY APPARENT ROOT CAUSE: 0

- a. One-Call Notification Practices Not Sufficient: 0
- b. Locating Practices Not Sufficient: _____
- c. Excavation Practices Not Sufficient: _____
- d. Other: _____

2. NUMBER OF EXCAVATION TICKETS : 40

PART E - EXCESS FLOW VALVE (EFV) AND SERVICE VALVE DATA

Total Number Of Services with EFV Installed During Year: 0

Estimated Number Of Services with EFV In the System At End Of Year: 20

* Total Number of Manual Service Line Shut-off Valves Installed During Year: 0

* Estimated Number of Services with Manual Service Line Shut-off Valves Installed in the System at End of Year: 451

**These questions only pertain to reporting years 2017 & beyond.*

PART F - LEAKS ON FEDERAL LAND

TOTAL NUMBER OF LEAKS ON FEDERAL LAND REPAIRED OR SCHEDULED TO REPAIR: 0

PART G - PERCENT OF UNACCOUNTED FOR GAS

UNACCOUNTED FOR GAS AS A PERCENT OF TOTAL CONSUMPTION FOR THE 12 MONTHS ENDING JUNE 30 OF THE REPORTING YEAR.

[(PURCHASED GAS + PRODUCED GAS) MINUS (CUSTOMER USE + COMPANY USE + APPROPRIATE ADJUSTMENTS)] DIVIDED BY (CUSTOMER USE + COMPANY USE + APPROPRIATE ADJUSTMENTS) TIMES 100 EQUALS PERCENT UNACCOUNTED FOR.

FOR YEAR ENDING 6/30: 2%

PART H - ADDITIONAL INFORMATION

PART I - PREPARER

Darin Blevins, operator (Preparer's Name and Title)	(606) 756-2183 (Area Code and Telephone Number)
dblevins@augustaky.com (Preparer's email address)	(606) 756-2185 (Area Code and Facsimile Number)

EXHIBIT 9

Gas System Operating & Maintenance Plan

City of Augusta

City of Augusta
219 Main Street
P.O. Box 85
Augusta, KY 41002

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Basic Operating and Maintenance Plan Information

1. Purpose of the Plan

This plan prescribes guidelines and minimum standards for the safe and reliable operation and maintenance of natural gas distribution systems.

2. Regulatory Requirements

The Natural Gas Pipeline Safety Act of 1968 required the Department of Transportation to develop and enforce minimum safety regulations for transportation of gases by pipeline. These regulations are published in Title 49, Code of Federal Regulations, Parts 190, 191, 192 and 199.

Each gas operator is responsible for compliance with the above regulations and must remain familiar with the requirements contained within.

Gas operating and maintenance procedures are specifically required under 49 CFR 192.605.

3. Implementing the Plan

The management of the City of Augusta is responsible for assuring that all persons having responsibility for operation, maintenance, and periodical inspection of this system are made aware of this plan and are properly trained and qualified to perform as required.

Records must be maintained to verify and document such training.

4. Omission from Plan

This plan is written to specifically include various topics of major significance to a gas distribution operator. All codes and standards incorporated by reference are to be considered as part of this plan to the extent that they are applicable.

No written plan is fully inclusive of all details pertinent to operation, maintenance, and inspection. Therefore industry accepted methods shall apply to those areas not specifically addressed in the plan.

5. Periodical Review of the Plan

This plan shall be reviewed and revised at intervals not exceeding 15 months, but at least once each calendar year to reflect current regulatory requirements and changes in the system.

Each person responsible for implementation of this plan is encouraged to offer suggestion that would make this plan more effective.

6. Terminology

Standard English dictionary definitions shall apply except where industry accepted terminology prevails. As used herein the following meanings and definitions apply:

<u>Employee</u>	Any person employed or authorized by the company to perform operating, maintenance, or construction functions related to the gas distribution system.
<u>Gas</u>	The combustible gas distributed for sale to customers of the company.
<u>Personnel</u>	Same as employee
<u>Main</u>	A distribution pipe that serves as a common source for more than one service line.
<u>Pipeline</u>	All parts of the physical system that carry gas, including mains, service lines, and district regulator stations.

Employee Responsibilities

1. Recognition of Hazards

Each employee shall remain aware of potential hazards resulting from natural gas leaks and other gas system malfunctions.

Such hazards include, but are not limited to:

- a. Natural gas when mixed with air is combustible. It is easily ignited by open flame, electric spark including static discharge, or by spark from abrasion. The gas has a lower limit of flammability of approximately 5% and an upper flammability limit is approximately 15% by volume mixed with air.
- b. Natural gas is lighter than air, with a specific gravity of approximately 0.6. Escaping gas will tend to rise from the point of escape and accumulate in higher locations.
- c. Natural gas escaping at high velocity through polyethylene pipe may cause a high voltage static electric discharge to occur, which may produce ignition under certain conditions. Specific precautions as described in "Prevention of Accidental Ignition OQ Task M-7" must be taken to minimize the danger of self-ignition from static electricity whenever a flammable gas is allowed to escape through plastic pipe.
- d. Potential hazards exist anytime excavation work is performed or work is performed within an excavation. Damage or injury resulting from interference with underground electric wires, asphyxiation, and ignition of gas or cave-ins are all possible hazards.
- e. All applicable company safety standards regarding personal protective equipment and work procedures must be followed to assure the safest possible work environment.
- f. All reasonable precautions shall be taken to protect the public from hazards resulting from escaping gas, open excavations, or other dangers resulting from operation and maintenance of the gas distribution system.

2. Implementation of Emergency Operating Plan

As required by 192.615, The City of Augusta has a written emergency plan to address and minimize the hazard resulting from a gas pipeline emergency. The emergency plan specifically addresses for the following emergency situations:

- a. Gas detected inside or near a building.
- b. Fire located near or directly involving a pipeline facility.
- c. Explosion occurring near or directly involving a pipeline facility.
- d. Natural disaster affecting a pipeline facility.
- e. Safe restoration of any service outage.
- f. Any situation which requires prompt and effective response to eliminate potential for injury or property damage resulting from gas.

Customer Meters and Regulators

1. Location of Customer Meters and Regulators

Each meter and service regulator must be installed in a readily accessible location and be protected from corrosion and other damage. Unless absolutely unavoidable, meters shall not be installed in any location where visits of the meter reader or tester will cause annoyance to the customer or severe inconvenience to the utility. Meters and regulators shall be installed outdoors whenever practical.

Meters in our near driveways or parking areas where subject to contact from vehicles shall be protected with suitable barricades.

Each regulator which might releases gas in its operation shall be vented to an outside location where gas is not likely to accumulate at or below ground level, and will not be likely to enter any opening into a building or come in contact with an ignition source.

2. Specific Requirements for Service Regulators

Each service regulator used must be capable of reducing distribution line pressure to the pressure recommended for household appliances.

All atmospheric vents on service regulator and relief valves must be insect resistant and protected against entry of rain or accumulation of water form condensation.

3. Installation of Customer Meters and Service Regulators

Each meter and regulator installation must be properly supported and designed to minimize anticipated stresses upon connections and piping. Use of all-thread (close) nipples is prohibited for gas carrying piping.

4. Meter Valves

Each service line valve installed above ground must be designed and constructed in a manner in which the possibility of removal of the core with other than specialized tools is minimized.

Excess Flow Valves

Beginning September 15, 2010, the City of Augusta will install excess flow valves on all new single residence service lines operating at or over 10 PSIG. The valves will be installed at the City of Augusta's expense. They will be installed according to 49 CFR Part 192, and the manufacturer's installation instructions.

On July 9, 2018, existing Augusta gas customers were mailed notification that Excess Flow Valves (EFV) are being made available to existing customers and installed for a fee. The notice included a contact number to call if interested.

Service Lines

1. Installing Service Lines

Each service line must be installed and connected to the main by qualified personnel in accordance with the construction specifications set forth in the appendix of this procedures manual and Operator Qualification Manual H-2.

All materials used must be of good quality and intended for use with natural gas. All pipe and fittings used must be manufactured and tested in accordance with applicable listed specifications.

2. Testing Service Lines

Each new service line must be pressure tested for leaks using air, inert gas, or other suitable test medium prior to being placed into operation. A good quality mechanical or electronic gauge must be used to monitor the test pressure for as long as necessary to discover any potentially hazardous leaks. If feasible the service line connection to the main must be included in the test; if not reasonable, the connection to the main must be leak tested at operating pressure when placed in service. In conducting pressure tests reasonable precautions shall be taken to protect employees and the general public from injury in the event of a failure of the service line or test apparatus.

Each disconnected service line must be tested in the same manner as a new service line from the point of disconnection to the meter valve prior to being put into operation.

Minimum test pressure for steel service lines intended to operate at 1 PSIG or less shall be 10 PSIG for five minutes.

Minimum test pressure for steel service lines intended to operate from 1 PSIG to 40 PSIG shall be 50 PSIG for not less than five minutes.

Minimum test pressure for steel service lines intended to operate from 100 PSIG or over shall be 90 PSIG for not less than five minutes.

Minimum test pressure for steel service lines intended to operate at 100 PSIG or over shall be 1.5 times maximum operating pressure for not less than five minutes.

Minimum test pressure for plastic service line shall be 50 PSIG or 1.5 times maximum operating pressure whichever is greater for five minutes.

Existing service lines not physically disconnected shall be tested at operating pressure for not less than 3 minutes.

3. Operation of Service Lines

Service lines, including customer meters and service regulators, must be included in the continuing surveillance program, corrosion control program, and periodic leakage survey.

4. Maintenance of Service Lines

All repairs to service lines must be made by qualified personnel using approved materials and methods as specified in the repair specifications in the appendix of the procedure.

In the event that gas is escaping from a damaged service line, reasonable precautions shall be taken to prevent accidental ignition and to protect employees and the general public from dangers that may result from oxygen deficiency or ignition of gas.

Each service line abandoned in place must be disconnected from the source of gas as close to the main as possible and the pipe ends sealed.

Corrosion Control

1. Atmospheric Corrosion Control

Each above ground pipeline or portion thereof which is exposed to the atmosphere and which carries gas under pressure must be painted coated or jacketed with a material suitable to prevent atmospheric corrosion. This includes exposed piping at distribution regulator stations, service risers and piping at customer meter and regulator installations, exposed pressure regulators, monitor regulators, relief valves and fittings, and all other exposed gas carrying main or service line piping.

At intervals not to exceed three (3) years, each above ground pipeline or portion thereof must be inspected for atmospheric corrosion. If atmospheric corrosion is found, proper remedial action must be taken to prevent further corrosion. If a paint or surface coating is used, the manufacturer's instructions should be followed for proper surface preparation and applications.

2. External Corrosion Control, Buried Piping

All buried gas carrying metallic piping must be effectively protected against external corrosion. Such protection may be provided by each of the following:

- a. All buried metal surfaces must be coated with a factory applied or field applied coating specifically designed to prevent underground corrosion.
- b. Cathodic protection must be provided by maintaining a pipe to soil potential of at least negative .85 volts and measured through a copper sulfate half-cell. Protective voltage is normally provided by means of magnesium anodes.
- c. The cathodically protected section must be electrically isolated from other metallic structures above or below ground.

Each pipeline that is under cathodic protection must be tested at least once each calendar year, at intervals not to exceed 15 months. Isolated short sections of cathodically protected piping, such as on service risers may be tested on a sampling basis if annual testing is not practical. At least 10% must be sampled each year distributed over the entire system, with a different 10% each subsequent year such that the entire system is sampled in a ten-year period.

3. Qualifications for Corrosion Control Personnel

All personnel conducting electrical surveys of cathodically protected facilities must be properly trained to use and maintain the instruments and to interpret the results. Corrosion Personnel must be qualified as outlined in the City of Augusta's Operator Qualification Plan.

Proper procedures must be followed for installation of anodes and application of protective coatings.

4. Corrosion Control Records

Records shall be maintained to show the locations of cathodically protected piping and facilities, and results of surveys and tests including remedial actions, for as long as each facility is in service.

Records must be in sufficient detail to demonstrate the adequacy of the corrosion control program, including control of atmospheric corrosion. However, cathodic protection records may be maintained separately from atmospheric corrosion surveillance records.

Continuing Surveillance

1. Scope of Surveillance Program

Each employee responsible for operation or maintenance is to remain attentive to conditions affecting the safety and reliability of the gas system and its components, and is to continually observe for such conditions during the performance of duties.

This surveillance is to include conditions surrounding or adjacent to the system which may lead to hazards.

2. Specific Surveillance Guidelines

The continuing surveillance program includes, but is not limited to observation for the following conditions:

- Excavation or construction activities near buried facilities.
- Mains or service lines exposed by soil erosion.
- Evidence of leaking gas from mains or service lines.
- Permanent or mobile dwelling units or other building structures placed or constructed over buried service lines or mains.
- Damaged customer metering facilities.
- Customer metering facilities in need of barricade protection.
- Atmospheric corrosion or rust on customer meters and associated piping.
- Abnormal pressure readings on system gauges.
- Missing locks or ineffective security on bypass valves or other valves, which could cause a system malfunction if operated by, unauthorized personnel.
- Required pipeline markers missing, damaged, or severely faded.
- Rooms, garage, carport or other structures built over a service line or main.

3. Remedial Actions

Any deficiencies must be acknowledged and appropriate remedial action initiated in accordance with the degree of urgency appropriate for the conditions observed.

Serious leaks or other imminent dangers must be given immediate attention, whereas atmospheric corrosion or other conditions not immediately hazardous may be scheduled for timely repair.

4. Surveillance Records

Records shall be maintained of the deficiencies found and the remedial actions taken. Location, date, description, and identity of worker should be included.

Damage Prevention

The City of Augusta will meet the requirements of 192.614 through participation in the states 811 one call system and their Public Awareness Plan.

Line Markers

Line Markers will be placed and maintained as close as practical over each buried main and transmission line except those in Class 3 or Class 4 locations where covered by the City of Augusta damage prevention program.

The markers will contain the words, "Warning," "Caution" or "Danger" followed by the words "Natural Gas Pipeline" along with the name "City of Augusta" and the phone number where the operator can be reached at all times.

Investigation of Failures

1. Scope of the Program

All accidents and failures directly involving the gas system must be investigated for the purpose of determining their cause, so that appropriate actions may be taken to minimize the probability of recurrence.

2. Guidelines for Investigation of Failures

All leaks in service lines or mains, over pressure conditions, system outages, or inadequate delivery pressure occurrences are considered as failures and should be investigated to determine factors which contributed to or directly caused the failure.

Leaks in polyethylene resulting from failed heat fusion or mechanical joints, or stress cracking in the pipe wall should be thoroughly investigated including laboratory analysis. If the cause of the failure is determined to be from defective material or defective workmanship a plan must be developed to locate other areas which may be affected, and to perform leakage surveys in locations within those areas where failure would present the greatest hazards. Current joining methods are to be reviewed to assure that written procedures are being followed by properly trained and qualified personnel.

Malfunctions of pressure regulating or over pressure protection devices must be investigated to determine whether the failure was caused by poor maintenance, defective material, or outside forces. If other pressure controlling devices are likely to be affected in the same manner, a program shall be implemented to check such devices on a sampling basis.

Tapping under Pressure

1. Qualification of Personnel

Each tap made on a pipeline under pressure must be made by personnel properly trained and qualified to make hot taps. Such training shall include recognition of hazards that may result from escaping gas as well as specific knowledge of the procedures for ignition prevention and control, and protection of personnel.

2. Safety Precautions

All applicable safety procedures shall be followed to assure protection from injury resulting from accidental ignition or oxygen deficiency.

Regulator Inspections

1. Pressure Regulators

Each pressure regulator used for pressure reduction or for pressure limiting should be inspected once each calendar year not to exceed 15 months.

The inspection will ensure that each regulator is in good working order, controls at its set pressure, operates or strokes smoothly and shuts off within the expected and accepted limits.

2. Additional Inspections

A visual inspection shall be conducted to assure that building, fences, storm drainage and exposed piping and equipment are in acceptable condition. All exposed piping and equipment should be visually inspected for evidenced of atmospheric corrosion. An inspection or test of stop valves should be made to ensure that the valves will operate and are correctly positioned.

3. Relief Valves

Each relief valve and other overprotection devises will be inspected at least once each calendar year not to exceed 15 months.

The inspection shall include but is not limited to:

- Adequate from the standpoint of capacity and reliability
- Checking the set-point pressure, inspecting the relief valve
- Inspecting the relief valve, branch piping and stack to ascertain they are in good mechanical condition
- Check for evidence of tampering
- Check for signs of atmospheric corrosion.
- Ensure plugs are in the test connectors.

Maximum Allowable Operating Pressure

The maximum allowable operating pressures (MAOP) for pipelines and pipeline facilities shall be established by using guidelines as set forth in 49 CFR Part 192.

The City of Augusta is responsible for insuring the maximum allowable operating pressure, which have been determined for each pipeline, are not exceeded. It shall be responsible for establishing and maintaining system (MAOP) records on all pipelines.

Emergency Valve Inspections

Designated Emergency Valves shall be inspected each calendar year not to exceed 15 months. The inspection shall include the following:

- Verify that the valve location measurements in valve book is correct
- Clean debris from the valve box to make operating the valve easier
- Verify that the type and size of the operating nut or curb valve type matches the listing can be operated with the keys and tool normally carried by gas company personnel
- Verify the Valve box lid is clearly identified with the word "Gas"
- Verify the valve number identification for each valve
- Check the pipeline facilities for atmospheric corrosion
- Partially operate the valve to ensure it is operable
- Lubricate the valve if necessary.

Odorization

1. Odorant Requirements

Combustible gas transported through distribution pipeline, must contain an odorant so that it is readily detectable by a person with normal sense of smell at a concentration of one-fifth (1/5) its lower explosive limit in air.

The odorant used must not be harmful to the materials used in the piping system or to people, and must not produce harmful products of combustion.

2. Sampling for Odorant

Natural gas is monitored monthly for odorant as required by 49 CFR 192.625.

Purging

1. Required Purging

Whenever a main or service line is being put into service, it is necessary for all air or other non-combustible gas to be purged from the line.

2. Safety Precautions

If a polyethylene main is being purged, special precautions must be followed to prevent static electricity from discharging and igniting the escaping gas. Such precautions are described in "Prevention of Accidental Ignition Operator Qualification Task M-7."

Anytime air is being purged with gas, or gas is being purged with air, it is necessary to maintain a rapid flow rate. This will ensure turbulence at the gas/air interface minimizing the size of the combustible mixture zone.

Care must be taken to ensure that gas is not discharged in an area in which it will accumulate and create a hazard. Potential ignition sources must be kept away.

Leakage Survey

1. Frequency of Surveys

Leakage surveys must be conducted as often as needed to discover leaks, which could result in a hazard. Leakage survey with leak detector equipment must be conducted in business districts at intervals not exceeding 15 months, but a least once each calendar year. Outside business districts intervals must not exceed 2 calendar years.

Additional surveys are necessary to assure that leaks have not developed following earthquake, major excavations activities, blasting, washout, landslide or ground settlement near gas pipeline facilities.

Additional survey may be required as a result of investigation of a failure as covered in "Investigation of Failures."

2. Method of Performance of Leakage Survey

Leakage survey may be conducted using either the surface or subsurface method.

A surface gas detection survey is a continuous sampling of the atmosphere performed using either portable or mobile equipment. Sampling is conducted at ground level for buried gas facilities and adjacent to above-ground facilities with a gas detector system capable of detecting a concentration of 50 ppm or gas in air at any sampling point.

Subsurface gas detection survey shall consist of testing bar holes with a combustible gas indicator or other instrument capable of detecting 10% or less of the lower explosive limit. The bar holes should penetrate to the depth of the main as close as practical to the main, taking care to avoid damaging the main. The sample should be drawn from near the bottom of each hole, taking care to avoid drawing water into the instrument. The instrument used should be equipped with a device to prevent liquid from being drawn.

Spacing of bar holes may be determined in accordance with the proximity to buildings and underground structures, such as sewers and manholes. In those areas where leaking gas would present the greatest hazard spacing should be closest. In all cases bar hole samples shall be taken near the service riser at the customer's meter. Areas in which service lines are near sewer lines or building foundations shall be sampled at intervals as close as necessary, but not to exceed 20 feet. Catch basins, manholes, and other underground structures near mains and service lines should be tested near the bottom.

Spacing of bar holes for surveying mains in close proximity to buildings or underground structures should be at intervals of twenty feet (20) or less.

Sewers, catch basins, ditch lines and other low areas in the proximity of mains and services shall be tested for gas as part of any leakage survey.

3. Grading Leaks

Each leak discovered must be graded according to the following:

a. Grade 1 – Hazardous Leak

Any leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until conditions are no longer hazardous is considered a Grade 1 leak. A leak which results in a measurable quantity of gas migrating into any buildings used for human occupancy or concentration of 50% or more of the lower explosive limit in a sewer, manhole, or other underground structure is Grade 1.

b. Grade 2 – Non-hazardous Leak

Any leak that is recognized as being non-hazardous at the time of detection but justifies scheduled repair based on probable future hazard.

Generally an outdoor leak in a main or service line and in which gas is not migrating into or near a building or underground structure is Grade 2. A leak that results in a slight concentration of gas migrating into a sewer, manhole or other underground structure away from any building used for human occupancy may be a Grade 2.

c. Grade 3 – Nuisance Leak

Any leak that is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous (less severe than a Grade 2.) may be considered to be a Grade 3 leak.

A very small leak, such as a fitting or valve on a meter loop, where the source of the leak is apparent and predictable may be Grade 3.

4. Disposition of Leaks

Any Grade 1 leak must receive immediate action to control the escape of gas or otherwise eliminate likely hazards. Normally the source of gas to the leak will have to be shut off using valves.

A Grade 2 leak may be scheduled for repair in a timely manner. Anticipated cold weather should be considered when scheduling repairs. Freezing ground surface may stop the ventilation of gas and force migration below ground. Also, interruption of service to customers presents greater hardship in cold weather.

Any Grade 2 leak not repaired within 6 months should be rechecked to assure that it has not become more hazardous.

A Grade 3 leak is not required to be repaired, but must be monitored annually to verify its classification. If the leak becomes severe enough to be classified as Grade 2, it must be scheduled for repair accordingly.

Records must be maintained of each leakage survey to document the areas surveyed and results. Survey dates, description of survey area, addresses of locations of leaks and their grades, type of instruments used, survey method, and names of survey technicians should be included.

5. Leak Records

Records must be kept for all leaks reported to the company or discovered by the company or its employees. Records must be retained for at least five (5) years and must contain address or location, method of detection or receipt of notice, date of detection, date of repair, follow-up surveillance dates, grade and description of cause and method of repair for each leak.

The leak records kept should contain information consistent with the annual reporting requirement of 49 CFR 191.11

Abandonment or Inactivation of Facilities

Each pipeline abandoned in place must be disconnected from all sources of gas and purged if the volume of gas contained is sufficient to present a hazard. The open pipe ends are to be sealed in a gas tight and water tight manner using an appropriate mechanical fitting, heat fusion, expanded foam or other effective method.

Whenever service to a customer is discontinued one or more of the following actions must be taken:

- a. The valve that is closed to prevent the flow of gas to the customer must be locked or otherwise prevented from operation by unauthorized persons.
- b. A mechanical device or fitting must be installed in the service line or meter assembly to prevent the flow of gas. A disc installed between the meter inlet and swivel is sufficient for this purpose.
- c. The customers piping must be disconnected from the supply of gas and the open pipe ends sealed.

If a customer is permanently disconnected or is expected to be discontinued for an extended time period, the service line should be disconnected as close to the main as possible to prevent third party damage.

Records should be maintained of inactive facilities to show the locations, dates, methods of isolation from gas, and other information, which will be needed later to properly return to service.

Preventing Accidental Ignition

1. Scope of the Program

Steps must be taken to minimize the probability of ignition of gas anytime gas is blowing to atmosphere, and in which ignition would present a danger to the public, personnel, or property.

2. Specific Precautions to Take

Whenever a hazardous amount of gas is being discharged into open air the following precautions shall be taken:

1. Avoid discharging natural gas into a confined space.
2. If in an area where public access is likely place barricades, traffic cones, or other controlling devices with suitable warning signs to limit ingress by the public.
3. Remove all apparent sources of ignition from the area of escaping gas. Motor operated equipment, open flame, smoking tobacco, two-way radio equipment, cellular phones and electric switches are all possible ignition sources.
4. Avoid wearing nylon, polyester, or other synthetic clothing while working around escaping gas. Synthetic materials are capable of producing static electricity, particularly when the humidity is low.
5. Test for presence of combustible gas in excavations before entering. Avoid entering if combustible gas is present at a concentration greater than 20% of the lower explosive limit (LEL). Use mechanical blowers if necessary to maintain less than 20% LEL when working in excavation.
6. Do not perform cutting, welding, heat fusion or other mechanical operations on mains containing gas-air mixtures. Mains must contain 100% gas or 100% air (or inert gas) when construction or maintenance work is performed.
7. Whenever separating metallic pipe such as at a customer's meter loop, place an electrical bond wire around the area of separation to maintain electrical continuity and eliminate sparking.
8. Whenever gas is discharging from plastic pipe special precautions shall be taken to prevent static discharge and spontaneous ignition.

3. Special Precautions for Polyethylene Pipe

Gas flowing at high velocity through polyethylene pipe may create a static electric charge on the wall of the pipe and on any particles of foreign material carried in the gas stream. This can cause ignition of the flowing gas to occur spontaneously. There are certain precautions that can be taken to minimize this probability of occurrence.

- a. When a plastic main or service line is punctured and must be squeezed to stop the flow of gas the squeezing should be done from a second hole a safe distance from the escaping gas.

- b. Wet cloth, cotton, canvas, burlap, or other natural fabric should be wrapped around the damaged or open pipe near the point of discharge. The wet fabric must contact the ground and the ground must be damp or wet. Liquid detergent should be mixed with the water used to wet the rags.
- c. A metal pipe should be used as the final discharge stack for purging or otherwise blowing gas to atmosphere. The metal pipe must be electrically grounded using a stranded copper wire and ground rod. The polyethylene pipe exposed proceeding the transition to the metal pipe should be wrapped with wet fabric as stated in (b).

Employee Protection

The City of Augusta will take adequate precautions in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapor or gas, and, making available when needed at the excavation, emergency rescue equipment, including a breathing apparatus and, a rescue harness and line.

To protect personnel or warn of unsafe vapors, an O² monitor will be used to detect before using rescue equipment.

APPENDIX A – CONSTRUCTION AND REPAIR

All construction and repair of gas carrying facilities in the gas distribution system must comply with the requirements of 49 CFR Part 192. This appendix contains a summary of construction and maintenance requirements for polyethylene systems that will help to ensure compliance with these regulations.

I. Qualification of Materials

All pipe, fittings, valves, and other components which carry gas under pressure must be chemically compatible with the gas being transported and must be designed to withstand the stresses which result from the intended operation.

All plastic pipe which carries gas must be polyethylene and must be manufactured in accordance with specification ASTM D2513. Pipe qualified under this specification must be marked at intervals of two (2) feet (or less) showing ASTM D2513, brand name, material grade, nominal size, wall thickness or SDR, and other batch identification. Polyethylene grades PE 2406 and PE 3408 are acceptable grades. The grade designation will normally be followed by a three-letter suffix that indicates an elevated temperature, its corresponding strength, and the melt index for the material.

Minimum wall thickness should correspond with the following table for polyethylene pipe: (all dimensions in inches)

1/2"	CTS	0.625 O.D.	.090	SDR 7
1/2"	IPS	0.840 O.D.	.090	SDR 9.3
3/4"	IPS	1.050 O.D.	.095	SDR 11
1"	CTS	1.125 O.D.	.099	SDR 11.5
1 1/4"	IPS	1.660 O.D.	.166	SDR 10
2"	IPS	2.375 O.D.	.216	SDR 11

Each heat fusion fitting for polyethylene must be made of a grade of polyethylene compatible with the pipe used. A qualified written procedure must be available for joining the fitting to the pipe.

Each plastic mechanical fitting used to join polyethylene pipe to polyethylene pipe must be made of a grade of a plastic material compatible with the gas being transported. An internal stiffener must be used to reinforce each pipe end, and must be the proper diameter for the size and wall thickness of the pipe. Gasket or compression ring material must be suitable for use with the natural gas.

Metal-bodied fittings are not desirable for joining polyethylene to polyethylene pipe below ground due to the need for cathodic protection and corrosion control surveillance.

Metal bodied transition fittings may be used to join polyethylene pipe to cathodically protected steel pipe below ground, or to steel pipe above ground. Each fitting must have a properly designed stiffener and gasket or compression ring material must be suitable for use with natural gas.

Qualified written procedures must be available for all mechanical fittings used with polyethylene pipe.

All steel pipe used at meter loops must be of a listed API or ASTM specification and must be schedule 40 or heavier wall thickness.

All fittings used at meter loops must be marked to show brand name or trademark and must be malleable iron or steel. Fittings must be designed for a least 150 PSIG working pressure and be of standard dimensions.

Meter valves must be tamper proof, such that the core is not easily removed with ordinary hand tools. Marking must include brand or trade name, pressure rating, "G" or other designation for gas and "T" or other designation for tamper proof construction.

II. Qualification of Personnel

All personnel engaged in the construction and repair of mains and service lines must be qualified as outlined in the City of Augusta's Operator Qualification Plan.

Each person who will be making a joint on polyethylene pipe, whether polyethylene to polyethylene or polyethylene to steel, must be certified in the use of the qualified written procedure for the joint being made. All provisions of 49 CFR 192.285 will be followed.

Welding on steel piping must be performed by a qualified welder in accordance with welding procedures qualified under section 5 of API 1104 incorporated by reference in 49 CFR Part 192.7.

III. Planning Construction of Mains

Prior to start of construction a comprehensive plan should be made. Limits of public right-of-way or easements and locations of other utilities, which may affect the proposed construction, need to be determined. The location selected for the proposed main must take interference with other utilities and other conflicts into consideration. Affected property owners and other

utilities should be advised of proposed construction. Application should be made for state and local permits when required.

The proposed main shall be designed of proper size to supply present and anticipated future demand. The maximum allowable operating pressure for polyethylene mains carrying natural gas may not exceed 60 PSIG.

IV. Installation of Mains

Distribution gas mains must be installed with 24-inch minimum cover. Where an underground structure prevents having 24-inch cover other precautions must be taken to protect the main against damage from anticipated external load or dig-in. Where feasible, a minimum of 12 inches shall be maintained between a main and other underground structure or pipeline.

Polyethylene mains may not be installed above ground unless fully encased in a steel pipe.

Polyethylene mains must be installed resting on well-compacted soil free of foreign objects or sharp rocks that may gouge or puncture the wall of the pipe. Backfill material must be free of sharp rocks or other material that may damage the pipe. If necessary sand backfill shall be compacted 6" minimum in each direction above, below, and beside the pipe to provide a cushion against damaging materials.

Polyethylene pipe must be transported and handled with care to avoid damage. Each section of pipe shall be visually inspected before being lowered into the trench. Any cuts or gouges that are 10% or more of the wall thickness in depth shall be repaired by removal of a section of pipe containing the damage.

Polyethylene pipe must not be stored for extended periods in direct sunlight. The pipe manufacturers' guidelines should be followed.

A tracer wire must be installed with polyethylene pipe. Solid or stranded copper wire, number 12 AWG or larger, insulated with plastic or rubber is recommended. The tracer wire should be electrically continuous with the tracer wire for each service line to provide accessibility for line locating. To the extent practical, physical contact between the tracer wire and main should be avoided to minimize potential damage from lightning.

As additional protection against third-party damage, installation of warning tape approximately 12 inches below the surface and directly above ground is recommended.

V. Inspection of Mains

Each main installed must be inspected by a properly trained and qualified person prior to being put into operation. This inspection is to ensure proper installation and joining and shall include the following:

- a. Credentials of each person making joints in polyethylene pipe must be verified to be current for the procedures being performed.
- b. All joints must be visually inspected for compliance with qualified written installation.
- c. The condition of the bottom of the ditch shall be checked to assure the pipe is resting on smooth and well-compacted soil, free of materials which may damage the pipe.
- d. The tracer wire must be examined to ensure continuity and accessibility after backfill.
- e. Depth of burial shall be checked.
- f. Surface of pipe shall be visually inspected for damage. Any pipe containing cuts or scratches penetrating 10% or more into the pipe wall must be cut out and replaced.
- g. Marking on pipe and fittings must be checked to verify compliance with material specifications.
- h. Backfill material must be checked for metal, sharp rocks, building scraps, or other materials that may damage the pipe surface.

VI. Testing Mains

Each main or section of polyethylene main must be tested to at least 150% of the maximum operating pressure, but not less than 50 PSIG before being placed into operation. Air, carbon dioxide, or nitrogen are acceptable test mediums. The test must be left on long enough to discover any potentially hazardous leaks. The final tie-in to an existing main may be leak tested at operating pressure with gas.

Any leaks discovered must be repaired.

VII. Main Records

Records must be retained for the useful life of each main to include at least the following:

- a. The name of the company operating the main.
- b. Test results including pressure, duration and medium used.
- c. Leaks or failures discovered during test and remedial action taken.
- d. Size, wall thickness, material designation, brand.
- e. Location of main and depth of burial.
- f. Date of installation.
- g. Name of contractor used for installation and testing.

- h. Name of employee inspecting or supervising installation.
- i. Any other information deemed appropriate.

VIII. Service Line Installations

Service lines must be installed with a minimum of 18 inches cover in public right-of-way and 12 inches cover in private property.

Polyethylene service lines must be installed on well-compacted soil free of foreign material or sharp rocks that may gouge or damage the wall of the pipe. Backfill material must be free of sharp rocks or other material that may damage the wall of the pipe. If necessary, sand backfill shall be compacted in each direction above, below, and beside the service line for protection.

Polyethylene pipe must be handled and transported with care to avoid damage. Each section shall be inspected before installation for evidence of deep scratches, cuts, or gouges which penetrate 10% or more of the wall thickness. Damaged pipe shall not be installed.

Polyethylene service pipe shall not be stored or exposed to direct sunlight for extended time periods.

A tracer wire must be installed with polyethylene service lines. Solid or stranded copper wire; number 12 AWG or larger, rubber or plastic insulated may be used. The tracer wire should be electrically connected with the tracer wire at the main, and should be brought above ground at the meter riser. Physical contact between the tracer wire and the service line should be avoided to minimize potential damage from lightning.

Connection to the main may be made using approved mechanical fittings or heat fusion fittings. A person certified to be qualified in the use of the procedure must follow qualified written procedures.

Polyethylene pipe must be shielded from exposure to sunlight or physical force when brought above ground. Anodeless risers or service head adaptors that encase the polyethylene pipe to an above ground transition may be used at meters.

Underground connections between service lines and mains or other fittings may be protected against shearing force from ground settlement with a sleeve of larger rigid plastic pipe. This sleeve may be any commercial grade of plastic.

Meter locations, meter supports, barricading, pressure testing, and recordkeeping shall be completed in accordance with information included in "Customer Meters and Regulators" and "Service Lines."

IX. Repairs to Mains and Service Lines

All repairs to polyethylene mains and service shall be made by removal and replacement of the damaged pipe. As with initial installation only approved mechanical or heat fusion fittings may be used by qualified personnel in accordance with qualified written procedures.

All applicable precautions shall be taken to ensure safety to the public and personnel.

EXHIBIT 10

CITY OF AUGUSTA NATURAL
GAS SYSTEM EMERGENCY
PROCEDURES REVISED
February 21, 2019

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INTRODUCTION

This manual has been prepared to provide company Personnel with data essential in an emergency situation.

It must be recognized that no emergency manual can cover all situations, that there is no substitute for the sound judgment of the situation by the person or persons involved, and that the safety and well being of the public must always be given prime consideration.

It is important that those who will have the responsibility of handling an emergency situation be familiar with the contents of the manual.

This manual is to be used as an emergency format and does not contain operational data.

DEFINITION OF EMERGENCY INCIDENT

An "Emergency" condition exists when a designated company representative has declared that extraordinary procedures, equipment, man-power and supplies must be employed to protect the public from existing or potential hazards. These hazards may include, but are not limited to the following:

1. Facility failures which result in:
 - A. Under pressure in the system.
 - B. Over pressure in the system.
 - C. Large volumes of uncontrolled escaping gas.
 - D. Fire or explosion, etc.
 - E. Any leak considered hazardous.
 - F. The continued safe operation of a major segment of the system is endangered.
2. Load Curtailment conditions where it is necessary to meet unusual and exceptional conditions by the voluntary or mandatory reduction of gas usage by selected customers.
3. Natural disasters such as floods, tornados, earthquakes or other severe forces of nature which make emergency provisions necessary.
4. Civil disturbances or riots which require special procedures.
 - A. Watchman of Company Facilities - duties of these people.
 - B. Person in charge of obtaining additional help - armed guards, fireman, police, National Guard, State Police.
5. National Emergencies.

COPIES OF EMERGENCY MANUAL HAVE BEEN GIVEN TO THE FOLLOWING:



1. Mike Taylor, Mayor
2. Darian Blevins, Maintenance Supervisor.
3. Matt Jones, Police Chief
4. Tony Mefford, Fire Chief

NOTE: TWO COPIES ARE LOCATED IN MAIN OFFICE NEAR TELEPHONE.

COMPANY PERSONNEL ADDRESS AND TELEPHONE DIRECTORY

WENDELL HIGH, MAYOR	[REDACTED]	[REDACTED]
JOE GOECKE, COUNCIL	[REDACTED]	[REDACTED]
LARRY BRADLEY, COUNCIL	[REDACTED]	
MATT MCCAIN, COUNCIL	[REDACTED]	[REDACTED]
TAY KELSCH, COUNCIL	[REDACTED]	[REDACTED]
TINA STICKLEN, COUNCIL	[REDACTED]	[REDACTED]
JACKIE HOPKINS, COUNCIL	[REDACTED]	[REDACTED]
GRETCHEN ENGLAND, CITY CLERK	[REDACTED]	[REDACTED]
ANGIE SCHWEITZER, SECRETARY	[REDACTED]	[REDACTED]
MATT JONES, POLICE CHIEF	[REDACTED]	[REDACTED]
TONY MEFFORD, FIRE CHIEF	[REDACTED]	[REDACTED]
HOWARD NIEMIER, SHERIFF	[REDACTED]	[REDACTED]
DARIAN BLEVINS	[REDACTED]	[REDACTED]
MARK KISKADEN	[REDACTED]	[REDACTED]
TROY ARCHIBALD	[REDACTED]	[REDACTED]
CYNTHIA THOMPSON, ATTORNEY	[REDACTED]	[REDACTED]

ORGANIZATION CHART AND ORDER OF NOTIFICATION

- | | | |
|-------------------------------|---|-------------------|
| 1. Darrin Blevins, Supervisor |  | 606-756-2182 Work |
| 2. Mike Taylor, Mayor |  | 606-756-2182 Work |
| 3. Troy Archibald, Maint. |  | 606-756-2182 Work |
| 4. Derrick Bach, Maint. |  | 606-756-2182 Work |
| 5. Gretchen England, Clerk |  | 606-756-2182 Work |

NOTIFICATION OF INTERRUPTION TO LARGE CUSTOMERS

1. Berry Corporation
PHONE: 756-2131
2. Bracken County Nursing & Rehabilitation Center
PHONE: 756-2156
3. AUGUSTA HIGH SCHOOL
PHONE: 756-2105

KEYS

PERSONS WITH KEYS TO DISTRIBUTION REGULATOR STATIONS

- 1 DARRIAN BLEVINS [REDACTED]
2. TROY ARCHIBALD [REDACTED]
3. DERRICK BACH [REDACTED]

ONE SHOULD NOT HESITATE TO BREAK THE LOCK IF THE CONDITIONS OF THE EMERGENCY WARRANT.

OPERATION OF SYSTEM VALVES

A gas distribution system is a complex network of interconnected mains, fed by regulators, and having valves throughout for the purpose of shutting off or diverting the flow of gas. Pressure in the mains may vary from very few pounds to hundreds of pounds.

Before operating any valves a study should be made to determine the effect upon the entire system. Improper operation of a valve may create hazardous conditions or cause a hazardous condition to become worse.

Only properly authorized personnel shall operate valves. Fire, police, other officials or other outside individuals are not authorized to operate valves or to instruct other, including gas company personnel, to operate valves. (Except end use valve.)

COLUMBIA GAS TRANSMISSION COMPANY PERSONNEL

Personnel of supplier to be contacted in case of emergency.

1. Forest Smith - Mt. Olivet, Ky
Office: 606-724-5712
Home: [REDACTED]
2. John Garrett - Foster, Ky
Office: 606-724-5712
Home: [REDACTED]
3. Cold Springs - Meter Station - manned 24 hours.
Phone: 606-441-8466
4. Joey Cadwell - Columbia Gas
Office: 606-724-2704

CITY OF AUGUSTA
NATURAL GAS SYSTEM
EMERGENCY PROCEDURES

Emergency Key Valve Operating

Issued By: Mayor Mike Taylor

Purpose: To outline procedures for shut-down of entire system or sectionalizing of the system by operation of key valves within the system.

Reference: D.O.T. 192.745 - D.O.T. 192-747

General: (1) These Key Valves shall be closed only upon the authorization of the Superintendent or, in his absence, of the person in charge. This authorization shall be relayed to and acted upon by the person turning off the valve only directly from the person in charge of the shutdown.

(2) Each employee who might have to operate or follow these procedures shall familiarize themselves with these procedures. (All personnel.)

Key Valve Operating Procedures:

(1) Transmission Line

(2) See attached Schedule A (City General)

(3) _____

(4) _____

(5) _____

CITY OF AUGUSTA
NATURAL GAS SYSTEM
EMERGENCY PROCEDURES

Subject: Emergency Key Valve Operating

Page 1 of 3

Issued By: Mayor Wendell High

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(2) Each employee who might have to operate or follow these procedures shall familiarize themselves with these procedures. (All personnel.)

Key Valve Locations:

To discontinue gas service to the entire city, shut off valves inside Regulator Station on KY # 8, also valves No. 18 & 22 on Fifth St.

CITY OF AUGUSTA
GAS SYSTEM
EMERGENCY PROCEDURES

Subject: Emergency Key Valve Operating

Page 2 of 3

Issued by: Mayor Wendell High

Key Valve Locations:

(continued)

and valve 17 & 19 on Fourth Street.

To discontinue service East of Regulator Station including the East side of Bracken Street, Frankfort Street from Second to Fourth, Sycamore Alley, all of Seminary & Hamilton, Second Street from Frankfort East & Fourth. From Frankfort East, Chapel Street, Fifth East of Regulator Station and all services in this area, shut off valves 19, 20, 22, 24, 25, 26, 29, and 30.

To discontinue service West of Regulator Station including West side of Bracken, all of Elizabeth Street, Main Street, Parkview, Park Street, Williams Street, Ferry Street, Riverside Drive, Second Street, from Frankfort West, Fourth Street from Frankfort West, Fifth Street West of Regulator Station and all services in this area, shut off valves 17, 18, 20, 23, 26, 29, & 30.

Page 3 of 3

*See drawings - sheets 1 & 2 for valve locations

For any shut - off of certain sections see drawings noted above

SCHEDULE A

1. On Seminary at Chapel on East side. On Second Street at Seminary on East side.
2. On Fourth Street at Seminary on East side. On Fourth Street at Hamilton on South side.
3. On Fourth Street at Seminary on South side. On Fourth Street at Hamilton on South side.
4. On Frankfort at Fourth Street on East side. On Seminary at Fourth Street West side. On Second Street at Seminary East side. On Frankfort Street at Second on North side. On Second at Frankfort on West side.
5. On Bracken Street at Fourth Street East side. On Frankfort Street at Fourth West side.
6. On Fourth Street at Bracken Street West side. At Fourth Street on North side of Tanyard Alley.
7. On Fourth Street South side at Seminary. On Seminary on North West Side. On Fourth Street at Frankfort Street.
8. On Fourth Street by Mrs. Wallace North's house two valves on South Side. On Fourth Street at Seminary, two valves on South side.
9. On Fifth Street from Regulator Station East. On Frankfort Street at Fourth Street on East Side.
10. Fifth Street at Standard Station in alley between John White and Nancy Lyons on Fourth Street.
11. Fifth Street at Elizabeth Street on South side. Fourth Street between Bracken Street and Elizabeth Street South side.
12. Fourth Street at Elizabeth Street South side, two valves. Fourth Street in alley between Nancy Lyons and John White leading to Fifth.
13. Elizabeth Street on East side.
14. North West comer of Elizabeth Street on North side of Riverside Drive. On Second Street and Frankfort Street on North East Comer. On North West corner of Fourth Street and Elizabeth Street.
15. Comer of Fourth Street and Main Street, North East comer.
16. Comer of Fourth Street and Main Street, North West comer.
17. Park Street and Fourth Street on North side. Park Street at Riverside Drive on South side.

18. North West comer on Riverside Drive at Williams Street. North West comer on Riverside Drive at Elizabeth Street. On Park Street at Riverside Drive, South side.
19. North West comer of Fourth Street on Williams Street. North West comer of Riverside Drive at Williams Street.
20. South West comer of Fourth Street.

TRANSMISSION LINE FAILURE PROCEDURES

Purpose: To outline emergency procedures for interruptions to supplier's transmission lines;

Step 1: Immediately go to the Transmission line regulator and metering station off of Route # 10 and monitor pressure on the outside of the District's Metering Station.


NOTE: Caution shall be taken in the shutdown Metering Station as damage to the supplier's regulation and metering equipment can occur if these valves are shut down while the suppliers' equipment is pressurized.

BREAK IN SUPPLIER'S TRANSMISSION LINE

If time permits, the person receiving notice of an interruption in the Columbia Gas Transmission Company's line should have the call transferred to the Gas Company Superintendent, or other management personnel, provided one of these parties can be reached. If not, the person receiving the call should obtain the following information:

1. Nature of interruption
2. Location
3. Minimum pressure expected at gate station
4. How fast pressure expected to drop and probable duration of minimum pressure

*Location of Keys to Columbia Gas Transmission Corporation's Metering Station at Chatham, Kentucky.

1. Paul Walter, R.R. # 1, Mt. Olivet, 606-724-5708
2. Columbia Gas, any employee, 606-724-5712
3. Darian Blevins, Supervisor 
Cell

INTERRUPTION IN SUPPLY (TRANSMISSION) LINE
**(LINE FROM COLUMBIA'S METERING STATION TO CITY
REGULATOR STATION)**

An interruption in the supply (Transmission) line could be due to three causes:

1. Freezing of the regulators supplying the line,
2. A break in the line or,
3. Sabotage in the form of closed valves.

If determined the fault is with the regulators, steps should be taken to by-pass regulator and manually regulate pressure to keep system properly pressured while correcting regulator malfunction.

If the trouble is due to a leak or major line break the odds are someone will report by phone by the time it will be noticed by company personnel. The person calling will be able to give the location of the leak or break otherwise it will be necessary to patrol the line.

Emergency personnel will, at their discretion, close appropriate valves to isolate the section containing the break.

FIRE OR EXPLOSION

WHICH SHOULD PUT OUT OR SERVICE GATE STATION OR DISTRICT REGULATOR STATIONS

Fire or explosion, which should put out of service gate station or District Regulator Station.

In the event of fire or explosion in a district regulator station this procedure shall be followed:

- Step 1. Upon arrival at the scene, determine the source of escaping gas - relief vent/regulation - etc.
- Step 2. If possible: shut down regulator or relief valve without over pressure of distribution system.
- Step 3. If unable to shut down regulator or relief valve without danger to employees or public - Designated Emergency valves for shut down or regulator station shall be closed. (A valve schematic showing valves and station follow this procedure.)
- Step 4. If complete shutdown of the distribution system is required – Emergency Procedure - No 6 - Light up procedure shall be followed.

(A copy of the Light-up Procedure follows this procedure.)

EMERGENCY CUSTOMER LIGHT-UP PROCEDURE

STEP 1. After completing the shutdown of the Transmission Line valves; begin in the closing of all customer 1st stage regulator valves and meter stops. The customer shall be informed of the interruption in service and that it will be restored as soon as possible.

NOTE: A list of customers with stand-by facilities are on file in the office and shall be notified in an expedient manner, either by telephone or personal contact of any interruption in their service area.

STEP 2. After all customer meter stops are closed, personnel shall stand-by to re-load the system as soon as pressures are adequate from the supplier.

STEP 3. If purging is necessary, the distribution system will be re-energized during the purging process. If the purging operation was not required, Step 4 will be to re-energize the system on a street by street basis.

STEP 4. Simultaneously or as each street is re-energized the light-up procedure shall begin.

FORMS:

- A. The office of Pipeline Safety Failure Report shall be completed and filed as soon as possible after the interruption.
- B. All other leak reports and repair forms to show the cause repair and test procedures used to restore service.

RESPONDING TO GAS LEAK REPORTS

The employee receiving a report of a gas leak will ask the person reporting leak the necessary questions to properly fill out the leak report form.

It is important that as much information as possible be obtained in order that the person receiving the call may properly evaluate the urgency of the call.

All reports of leaks on consumer premises will receive priority-with top priority going to a reported leak inside a building.

After the necessary questions have been asked and it has been determined that a hazardous gas leak exists inside a building, the customer should be advised to:

1. Evacuate the occupants of the structure to a safe distance.
2. Not operate any electric switches.
3. Do not use the phone
4. Extinguish all open flames do not use matches, cigarettes, or other possible sources or ignition.
5. Turn off gas meter if feasible.

Necessary personnel will be dispatched to the location of the reported leak to make an evaluation.

It is the responsibility of the supervisors to make sure the proper employees are familiar with the procedure concerning gas leak calls.

A complete file of completed leak report forms will be kept along with any other pertinent records concerning the leak.

TELEPHONE REPORTS TO DEPARTMENT OF TRANSPORTATION

Gas leaks that are not intended by the operator and the require immediate or scheduled repair and test failures, by persons engaged in the transportation of gas must be reported to the office of Pipeline Safety by the person in charge or who so ever be designated, provided that the leak or test failure meets one of the requirements listed below:

1. Caused a death or a person injured requiring hospitalization.
2. Required the taking of any segment of transmission pipeline out of service unless part of planned or routine operation.
3. Resulted in gas igniting unless part of planned or routine operation.
4. Caused total damage in excess of \$5,000 (Total of operator's damage and damage to others.)
5. Could have resulted in or was a significant incident to the operation, this being in the judgment of the operator even though it does not meet the criteria of the above requirements.

Test Failures: A break or rupture that occurs during a strength-proof testing of transmission lines that is of such magnitude as to require repair.

Transmission Line: Any line operating over 20% of S.M.Y.S. The telephone report to the D.O.T. should contain:

1. Name of Company
2. The location and time and date of incident
3. Fatalities and personal injuries
4. All other significant known facts that are relevant to the cause of the leak or extent of the damages.

(Describe accident)

5. Who in management should be contacted upon arrival at accident site. The telephonic report, if required, should be made at the earliest practicable moment following discovery.

Call 202-426-0700 FEDERAL DEPARTMENT OF TRANSPORTATION

PUBLIC SERVICE COMMISSION

OFFICE HOURS: (502) 564-3940

AFTER HOURS: (502) 564-7815

GAS LEAK OUTSIDE

The first gas company employee to arrive at the scene of a gas leak shall take every corrective action necessary to protect life and property from danger.

The employee shall:

1. Assess danger to public, surrounding building occupants, and property
2. If necessary, evacuate and/or assist all persons to safety
3. If necessary, notify Fire and Police Departments and ambulances
4. Notify supervisor and/or other responsible persons
5. If necessary, blockade the area. (Police help may be needed.)

It will be the responsibility of the person in charge to:

1. Set up communication
2. Coordinate the operation
3. Make all decisions concerning emergency valves, isolating areas and the use of emergency equipment
4. Implement the check list

The above describes a catastrophic condition, an extremely hazardous condition, or a condition requiring major pressure changes and the re-routing of gas. Small routine leaks will normally be handled in the field.

It will be the responsibility of the person in charge of the operation and repair to give careful consideration to any action taken to assure that nothing is done which may endanger life or property, create another emergency or unnecessarily disrupt service.

A Comprehensive report shall be prepared for each incident. This report shall contain:

1. The location and time and date of the incident
2. Fatalities and personal injuries
3. All other significant known facts that is relevant to the cause of the leak or extent of the damages. (Describe incident)

A complete record of the report shall be kept on file.

CHECK LIST (MAJOR DISASTER)

1. Has the Fire Department been called?
2. Have persons been evacuated and area blockaded?
3. Has the Police Department been notified?
4. Has the repair crew been notified?
5. Has the company call list been executed?
6. Has communication been called?
7. Has outside help been requested?
8. Have ambulances been called?
9. Has the leak been shut off or brought under control?
10. Has the Civil Defense been notified?
11. Have the emergency valves or proper valves to shut down or re-route gas been identified and located?
12. If an area has been cut off from a supply of gas, has the individual service or each customers been cut off?
13. Is the situation under control and has the possibility of re-occurrence been eliminated?
14. Has the surrounding area been probed for the possibility of further leakage?
15. Has the Telephonic Report to OPS/DOT been made?
16. Has the radio and T.V. been given instructions?

GASLEAK: HOUSE and/or BUILDING

This first gas company employee to arrive at the scene of a gas leak shall take every corrective action necessary to protect life and property from danger. **(DO NOT RING THE DOOR BELL.)**

Immediately after entering house, sample air in rooms, basement or crawl space with a gas indicator. If the presence of a dangerous concentration of gas in the house is indicated - 40% on L.E.L. (Lower Explosive Limit) 2% on percentage (%) scale proceed as follows:

1. Evaluate the house immediately
2. DO NOT operate any electrical switches
3. DO NOT use phone
4. Shut off gas meter valve
5. Open doors and windows if below 15%
6. Probe outside house with rod and gas indicator for gas in ground outside building; check water meter and available openings
7. If ground is gas free outside house and after house is properly aired out, turn on meter valve and check all gas piping and appliances for leaks. Use meter test hand and soap water - be sure meter test hand is operative. Check walls and openings with gas indicator.
8. Repair leak or notify customer to correct the situation, turn off, lock meter and leave off.
9. Return occupants to house, but only after you are positively sure it is safe to do so.

RESTORATION OF SERVICE DUE TO OUTAGE

When the supply of gas has been cut off to an area, no gas will be turned on to the affected area until the individual service to each customer has been turned off. A house to house operation is mandatory. The individual service of each customer must be turned off, either at the meter or at the meter or at service valves. If the service valve cannot be located, the service line must be uncovered; a service valve installed and cut off. In restoring service to an affected area all gas piping and meters must be purged and appliances re-lit. In the event a customer is not at home, a card must be left in a conspicuous location requesting the customer call the gas company to arrange for restoration of service.

The person in charge is to coordinate this operation and be responsible for same. A complete record of the incident, with drawings, etc. shall be kept on file.

NOTES

1. If gas is found in the ground outside the building, call your supervisor immediately after performing steps 1, 2, 3, 4, and 5 above. Open water meter boxes and available openings to allow gas to escape to the atmosphere. Care must be taken to make these openings safe for traffic and to avoid ignition.
2. If ever in doubt call your supervisor.(Phone outside of contaminated area.)
3. If gas is found in the ground outside the building, be sure to check neighboring buildings even if they have no gas service. If there is a possibility of gas from a leak entering premises that are closed, notify police to request a forcible entry to the premises.
4. Do not rely on your sense of smell to determine if gas is present in a building or in the ground. Use instruments provided to you for this use.
5. Electric meters may be removed to shut down all lights and electric appliances in the house. Do not attempt this if the electric meter is outside the house or in an area of gas concentration. Houses or commercial buildings where no gas is present at the master fuse panel, the switch or switches may be turned off. However, it is imperative that the combustible gas indicator shows that no gas is present in or around the area of the panel.

6. If it is-determined it is unsafe to enter the basement of the house, knock out the basement windows from the outside to air out basement.
7. After all gas has been cleared and it has been determined it is safe to reset the electric meter, call the electric company to reset and seal the electric meter.
8. When checking a house or building consider 40% on L.E.L. (Lower Explosive Limits) scale or 2% on the 100% scales of a combustible gas indicator to be dangerous. This reading should be in free air.
9. Be sure your gas indicating instrument is set on the proper scale and that all connections on the sampling tube are tight.
10. When sampling air in a building have your instrument set on the L.E.L. scale. Remember that natural gas is lighter than air.
11. When sampling in probe holes in the ground have your instrument set on 0-100% scale, if a very low reading is obtained (2% or less) then the instrument may be set to the L.E.L. scale. (This applies only to the multi scale instruments.)

EMPLOYEE TRAINING

Periodically an employee meeting shall be scheduled to discuss and train employees on emergency procedures. This training shall be coordinated by the City Superintendent. The employee training and discussions shall include, but not limited to, the following:

1. Location of Emergency Manual
2. Review of Emergency Manual Procedures. (Employee responsibility)
3. Review the location and use of emergency equipment
4. Review the locations and use of the following:
 - A. System maps
 - B. Main records
 - c. Service records
 - D. Valve records
 - E. Regulator station schematics
 - F. Properties of natural gas
5. Take a hypothetical emergency situation and, step by step, review the action to be taken. (Include public officials, firearms, police and contractors, etc.)
6. Record keeping

Records shall be kept on file of attendance and items discussed at each meeting.

PUBLIC EDUCATION

There shall be a continuing education program to enable customers, the public, appropriate governmental organizations, and persons engaged in excavation related activities to recognize a gas emergency for the purpose of reporting it to the gas company.

The program material shall include, but not limited to:

1. Information about gas properties
2. Recognition of gas odors
3. What to do and not to do when there is a strong gas odor
4. Notification of the gas company prior to making excavations or excavation related activities. (No phone contaminated area)
5. Gas company phone number and after hours numbers to call for information or to report an emergency

This information may be conveyed to the public by:

1. Radio and television
2. Newspaper
3. Meetings
4. Bill stuffers
5. Mailings
6. Hand-outs

A record shall be maintained of the public education program and related activities.

LIAISON WITH PUBLIC OFFICIALS

Liaison shall be established with fire, police, civil defense, and medical officials with respect to emergency procedures.

Set up means of communications.

Meetings shall be held with the appropriate officials to acquaint them with the company capabilities and procedures respecting gas emergencies and to learn the capability and responsibility of each government organization that may respond to an emergency.

Training sessions, as required, may be scheduled with fire, police, civil defense and medical organizations to train them in the proper procedures to follow during a gas emergency.

Participation in fire, police, and civil defense meeting, both on local and state levels. The General Superintendent, or his designate, will implement and coordinate this program. A record shall be filed of all meetings, training sessions and other related activities.

NOTES ON INFORMATION GIVEN TO THE NEWS MEDIA

In case of an emergency, should any employee receive requests for information from TV stations, radio stations, newspaper reporters, etc., refer them to the General Superintendent, or in his absence his assistant. Explain that you do not have the authority to provide information.

The following suggested plan of Public Announcement may be as followed:

1. Allay any unfounded fears
2. Do not make reckless comments
3. Tell precisely what the public can do to help
4. Tell specifically what the gas company is doing about it
5. Give the facts to prevent baseless rumors
6. Repeat most encouraging view of situation in absence of facts

ACCIDENT INVESTIGATION

Each operator shall establish procedures for analyzing accidents and failures including the following:

1. Investigation of all company facilities to determine if accident was gas related.
 - A. Leak Survey
 - B. Pressure tests of piping
 - c. Meter and regulator check
 - D. Questioning persons on the scene
 - E. Examining Burn and Debris patterns
 - F. Odorization Level
 - G. Recording Meter Readings
 - H. Weather conditions
2. Procedures to follow if accident was gas related.
 - A. Selection of samples of the failed facility or equipment for laboratory examination for the purpose of determining the causes of the failure and minimizing the possibility of recurrence.
 - B. Notify insurance company

CITY OF AUGUSTA

OPERATION AND MAINTENANCE PROGRAM

The following items must be accomplished to comply with DOT regulation and have a safe system that can be insured.

- 1) Valve inspection and maintenance
 - A. Service and operate transmission and distribution valves and boxes yearly
 - B. Service and operate curb stops and boxes on 5 year frequency
 - C. Record inspection and have on file
- 2) Pressure limiting and regulator inspection
 - A. Regulator - inspect - test - repair yearly
 - B. Indicating and recording gauges yearly
 - C. Record inspection, repair and have on file
- 3) Relief valves, test and inspect
 - A. Distribution relief check yearly
 - B. Commercial and industrial relief yearly
 - C. Record inspection and repair and have on file
- 4) Leak Surveys
 - A. Business district and residential yearly
 - B. Service lines yearly
 - C. Transmission line every 6 months
 - D. Record survey findings and repair and keep on file

- 5) Gas line patrolling
 - A. Distribution and transmission every 6 months
 - B. Record findings and repair leak and record
- 6) Customer meters
 - A. History card for all meters
 - B. Set up files and keep current
- 7) Frequency of meter tests
 - A. Up to 500 cu. Feet - 10 years
 - B. 500-1500 cu. Feet - 5 years
 - C. 1500 and up - annually
- 8) Cathodic Testing
 - A. Test station
 - B. Exposed pipe
 - C. Test yearly; install new anodes and record results before and after
- 9) Abandoned lines and services
 - A. Each facility abandoned in place, or expect when undergoing maintenance each line not subject to gas pressure, must be disconnected from all sources and supplies of gas, purged of gas and the ends sealed; however, the line need not be purged when the volume of gas is so small that there is no potential hazard.
 - B. If air is used for purging the operator shall ensure that a combustible mixture is not present after purging.