U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
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WARNING LETTER

OVERNIGHT EXPRESS DELIVERY

January 15, 2025

Mr. Daniel Rifenburgh
Director, Richmond Gas Works
City of Richmond
400 Richmond Highway
Richmond, Virginia 23224

CPF 1-2025-004-WL

Dear Mr. Rifenburgh:

Between February 8, 2023 and April 12, 2024, an inspector from the Virginia State Corporation Commission, Division of Pipeline Safety (VA SCC), acting as Agent for the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected the City of Richmond (City).

As a result of the inspection, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:

1. § 192.273 General

(a) …

(b) Each joint must be made in accordance with written procedures that have been proven by test or experience to produce strong gastight joints.

The City failed to make each joint in accordance with written procedures that have been proved by test or experience to produce strong gastight joints. Specifically, the City failed to follow its manufacturer's procedure, by not scribing the area on the pipe prior to scraping the pipe.

The City's procedure requires manufacturer's procedures to be followed when performing an electrofusion. Georg Fischer Electrofusion manual stated in part:

"1. Establish a **CLEAN ZONE**, mark an initial clean zone.
…
2. Establish a **SCRAPE/PEELING ZONE**. Mark a second area inside the initial clean zone that is **SLIGHTLY LONGER THAN THE AREA TO BE PEELED**. …
3. Scribe the pipe surface at regular intervals or mark in a criss-cross pattern, so that any areas missed by the scraping tool will be visible by the marks that still remain. **MARK SLIGHTLY BEYOND THE SCRAPE/PEELING ZONE, SO THAT SOME WITNESS MARKS WILL BE VISIBLE AFTER PEELING**. …
4. Allow marks to dry before scraping/peeling the pipe and make sure that the scraping tool does not contact pipe that has not been cleaned previously. …"

During the inspection, the VA SCC inspector observed the City perform an electrofusion without scribing prior to scraping the pipe.

Therefore, the City failed make each joint in accordance with written procedures, as required by § 192.273(b).

2. § 192.605 Procedural manual for operations, maintenance, and emergencies.

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

The City failed to follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. Specifically, the City failed to follow its Natural Gas Procedures Manual (Procedure), by not ensuring that the squeeze-off point was installed at least 12 inches away from a mechanical coupling.

Procedure Volume II, Chapter 3, Section VII, Pressure, Flow Control and Tapping of Plastic Pipe stated in part:
"**IV PROCEDURES**
A. Squeeze-Off Tool Operation
1. …
3. The point of squeeze shall be located at least three diameters of pipe or 12", whichever is greater, away from the nearest:
a. Fused joint
b. Transition fitting (also, do not squeeze between the steel portion of the fitting and the first fused joint)
c. Mechanical coupling
d. Previous squeeze-off location.

During the inspection, the VA SCC inspector observed the City had squeezed-off the service line upon arrival. The inspector then observed the City install an excess flow valve (mechanical coupling) approximately eight inches from the squeeze-off point. Prior to joining the service pipe to the coupling, VA SCC inspector brought the concern to the City's attention.

After VA SCC brought the concern to the City's attention, the City dug and exposed the tapping tee, removed the squeezed portion of pipe entirely as well as the coupling. A new section of pipe and new excess flow valve mechanical coupling were installed.

Therefore, the City failed to follow written procedures, by installing a squeeze-off within the minimum prescribed distance from a mechanical coupling, as required by § 192.605(a).

3. § 192.605 Procedural manual for operations, maintenance, and emergencies.

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

The City failed to follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. Specifically, the City failed to follow its Natural Gas Procedures Manual (Procedure), by not installing a regulator vent beyond minimum prescribed distances.

Procedure Volume II, Chapter 3, Section X, Customer Manifolds, Meters, and Regulators, Exhibit B stated in part:
"**Minimum Meter Location Requirements:**
1. Regulator Vent* must be installed to maintain a minimum clearance of 36 inches from ANY:
-Door (Including Garage Doors)
-Windows that Open
-Gravity Air Opening (into a building)
-Rotating Electrical Equipment
-Electrical Motors
-Electrical Outlets
-Electrical Switches
-Electrical Disconnects
…"

Procedure Volume II, Chapter 3, Section X, Customer Manifolds, Meters, and Regulators, Exhibit C stated in part:
"**Meter and Regulator Installation Location and Clearances**

- …
- The meter must be in a readily accessible location where gas from the vent can escape freely into the atmosphere and:
    - …
    - 3’ from any window that opens
    - 3’ from any other opening into or under the building including dryer vents and foundation vents
    - 3’ from any ignition source including:
        - Electric meter
        - Electric panel
        - Electric outlet
        - Electric pedestal
        - Grounding electrode
        - Air conditioning unit and associated disconnect
        - Pad mounted transformer
    - 1’ from any water spigot

All measures are from the regulator vent. If there is no regulator, then measurements are from the meter inlet. In some cases the vent can be extended to achieve the required clearance listed above. Any exceptions must be approved by the appropriate RGW Operations Manager.”

During the inspection, the VA SCC inspector observed the City had installed a regulator vent 21-inches away from a dryer vent, 21-inches from a window that opens, and 20-inches from an air conditioning unit.

After VA SCC brought the concern to the City’s attention, the City relocated the regulator vent away from openings and any ignition sources.

Therefore, the City failed to follow written procedures, by not installing a regulator vent beyond minimum prescribed distances, as required by § 192.605(a).

4. § 192.605 Procedural manual for operations, maintenance, and emergencies.

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

The City failed to follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. Specifically, the City failed to follow *Procedure Volume II, Chapter 3, Section X, Customer Manifolds, Meters, and Regulators* (Regulator Procedure), by installing 16 regulator vents within the prescribed minimum clearance.

The Regulator Procedure Exhibit B stated in part:
"Minimum **Meter Location Requirements:**
1. Regulator Vent* must be installed to maintain a minimum clearance of 36 inches from ANY:
-…
-Rotating Electrical Equipment
-Electrical Motors"

During the inspection, the VA SCC inspector observed the City had recently installed regulators. The vents to the exterior cabinet of nearby air conditioner units were within 36-inches at the following locations:

- 5249 Goolsby Court
- 5247 & 5245 Goolsby Court
- 5243 & 5241 Goolsby Court
- 5239 & 5237 Goolsby Court
- 5235 & 5233 Goolsby Court
- 5231 & 5229 Goolsby Court
- 5227 & 5225 Goolsby Court
- 5223 & 5221 Goolsby Court
- 5219 & 5217 Goolsby Court
- 5215 & 5213 Goolsby Court
- 5211 Goolsby Court
- 5207 & 5205 Goolsby Court
- 5203 & 5201 Goolsby Court
- 5200 & 5202 Goolsby Court
- 5204 & 5206 Goolsby Court
- 2742 Goolsby Avenue

The City remediated the regulator vents identified by VA SCC.

However, the City failed to follow written procedures, by not installing regulator vents with prescribed minimum clearances, as required by § 192.605(a).

5. § 192.605 Procedural manual for operations, maintenance, and emergencies.

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

The City failed to follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. Specifically, the City failed to follow its Natural Gas Procedures Manual (Procedure), by boring within two feet of a known utility.

Procedure Volume II, Chapter 3, Section II, Pipeline Construction, Paragraph H stated in part that "Boring shall not be performed within 2'(ft) of a known utility".

During the inspection, the VA SCC inspector observed the City had bored a service line within 14-inches from an existing gas service line marking and 19-inches from an existing water service line marking.

Therefore, the City failed to follow written procedures, by boring within two feet of known utilities, as required by § 192.605(a).

6. § 192.616 Public Awareness.

(a) Except for an operator of a master meter or petroleum gas system covered under paragraph (j) of this section, each pipeline operator must develop and implement a written continuing public education program that follows the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 (incorporated by reference, see § 192.7).

The City failed to develop and implement a written continuing education program that follows the guidance in the API RP 1162. Specifically, the City failed to provide messaging to excavators at the prescribed minimum frequency.

Public Awareness Plan Gas Distribution, revised December 1, 2021, stated in part:
"6.0 Message Type, Content and Frequency
The following messages type and content will be sent to each stakeholder audience via the media listed at the frequency indicated on the charts on page 13 and 14 [sic].
…

Summary of Public Awareness Communications

Stakeholder Audience	**Message Type**	**Suggested Frequency**	**Suggested Delivery Method and/or Media**
…	…	…	…
Excavators/ Contractors	**Baseline Messages:** • Pipeline purpose and reliability • Hazard awareness and prevention	**Baseline Frequency:** Annual	**Baseline Activity:** • One-Call Center outreach (DPC, PIO) • Group meetings (DPC, PIO, TD)

	• Leak recognition and response • Damage prevention awareness • How to get additional information	**Supplemental Frequency:** • As scheduled by SCC • After excavation damage • Twice Annually	**Supplemental Activity:** • Radio/TV Adv. (PIO) • Targeted distribution of print materials to excavators who have hit our facilities (PIO, DPC) • Targeted distribution of print materials to a random selection of other excavators (DPC, PIO)

During the inspection, the VA SCC inspector requested records of public awareness messaging to excavators. The City was unable to provide documentation.

Therefore, the City failed to implement a written continuing public education program, by not providing messaging to excavators at minimum required intervals, as required by § 192.616(a).

7. § 192.616 Public Awareness.

(a) …

(c) The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.

The City failed to follow the general program recommendations, including baseline and supplemental requirements of API RD 1162. Specifically, the City failed to provide management support. as required by API RP 1162 Section 2.5[1], in accordance with § 192.616(c).

Public Awareness Plan Gas Distribution, revised December 1, 2021discusses responsibilities of the City's Public Information Officer (PIO) which stated in part:
" *DPU Public Information Officer (PIO)* is responsible for preparing public education materials, placing ads in television, radio, and newspaper. The PIO is also responsible for periodically updating the DPU/RGW website and performing random surveys/audits at various customer/noncustomers/contractor and emergency/public officials' seminars and events. …"

During the inspection, the VA SCC inspector discovered the City's PIO has not attended its Public Awareness Program quarterly meetings since December 2021. The City's PIO did not appear to respond to performance and compliance need requests from the City's Public Awareness Program staff.

Therefore, the City failed to follow the general program recommendations of API RP 1162 by not providing management support, as required by § 192.616(c).

8. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a) …

(b) Ensure through evaluation that individuals performing covered tasks are qualified;

The City failed to ensure through evaluation that individuals performing covered tasks are qualified. Specifically, the City failed to ensure that personnel were qualified to squeeze off plastic pipe.

During the inspection, the VA SCC inspector observed the City had installed a squeeze off tool on the service line installed by Technician A. VA SCC witnessed Technician A squeeze off the service line again. VA SCC requested qualification records for Technician A. The City provided two sets of qualification records. Neither record contained information the covered task "squeeze off pipe" for Technician A.

Therefore, the City failed to ensure individuals performing covered tasks were qualified, as required by § 192.805(b).

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed $266,015 per violation per day the violation persists, up to a maximum of $2,660,135 for a related series of violations. For violation occurring on or after January 6, 2023 and before December 28, 2023, the maximum penalty may not exceed $257,664 per violation per day the violation persists, up to a maximum of $2,576,627 for a related series of violations. For violation occurring on or after March 21, 2022 and before January 6, 2023, the maximum penalty may not exceed $239,142 per violation per day the violation persists, up to a maximum of $2,391,142 for a related series of violations. For violation occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not exceed $225,134 per violation per day the violation persists, up to a maximum of $2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed $222,504 per violation per day the violation persists, up to a maximum of $2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed $218,647 per violation per day the violation persists, up to a maximum of $2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed $213,268 per violation per day, with a maximum penalty not to exceed $2,132,679.

We have reviewed the circumstances and supporting documents involved in this case, and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to correct the item(s) identified in this letter. Failure to do so will result in City of Richmond being subject to additional enforcement action.

No reply to this letter is required. If you choose to reply, in your correspondence please refer to **CPF 1-2025-004-WL.** Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. § 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. § 552(b).

Sincerely,

ROBERT THOMAS BURROUGH

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Robert Burrough
Director, Eastern Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

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[1] API RP 1162 Public Awareness Programs for Pipeline Operators
2 Public Awareness Program Development
2.5 Management Support
For a Public Awareness Program to achieve its objectives, ongoing support within the operator's organization is crucial. Management should demonstrate its support through company policy, management participation, and allocation of resources and funding. Finding and resource requirements for an operator's Public Awareness Program development and implementation will vary according to the program's objectives, design, and scope. Full organizational support can make a marked difference in the way the Public Awareness Program is received and can affect the overall effectiveness and success of the program.