IGU
INTERIOR
GAS UTILITY

2525 Phillips Field Road . Fairbanks, Alaska 99709 . (907) 452-7111 . FAX (907) 452-8111

March 30, 2023

Dustin Hubbard
Director, Western Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

Subject: CPF 5-2023-009-NOPV
Interior Gas Utility
30-day Response

Dear Mr. Hubbard:

Interior Gas Utility (IGU) received your notice of probable violation on March 1, 2023. As required, we are submitting this response within 30 days of receipt.

In this letter response, IGU is providing additional information, compliance work that has progressed since the inspection, and further explanations. IGU requests that you consider this information for the purposes of reducing the scope of any potential compliance order. IGU specifically requests that proposed civil penalties be waived. Alternatively, IGU would request that penalties be suspended and reconsidered after completion of work under a compliance order.

As a small business, as defined by SBA size standard for NAICS code 221210 (fewer than 1,150 employees), IGU's operational capabilities would be adversely affected by such penalties. IGU's full-time employee count is approximately 32 employees.

IGU has demonstrated its willingness and ability to improve our PHMSA compliance program. Recently we developed new standard operating procedures SOP G-1120 Control Room Management Fatigue Mitigation and SOP G-1440 Eliminating leaks and Minimizing Releases of Natural Gas. Additionally, IGU responded to CPF 5-2022-016-NOA – related to the August 2021 inspection, which was closed out by PHMSA on January 31, 2023. These and other improvements, listed herein, have been undertaken by IGU since the August 2021 inspection. We continue to demonstrate our commitment to 100% PHMSA compliance.

During the period of time at issue, IGU was challenged with various difficulties related to the

COVID crisis. At times, this affected our staff, our service providers, off-site vendors, and ability to function as normally expected.

IGU offices were relocated in August 2021 to 2525 Phillips Field Road. The transition created some challenges with respect to reporting and affected our ability to locate some information. In some cases, it appears we have misplaced or lost written records in the move.

1. **§ 192.16 Customer notification.**

   "IGU did not have a customer notification process in place that satisfied the requirements of §192.16. The operator did not provide any procedures, records, or documentation demonstrating it had notified customers that it did not maintain the customer's piping. There was no customer notification process in place, nor had any customers ever been notified as required by the regulation."

   IGU Response:

   IGU contests this allegation, elects not to have a hearing, and provides an explanation.

   Regulation §192.16 states that the subsection applies to "each operator of a service line who does not maintain the customer's buried piping up to entry of the first building downstream, or, if the customer's buried piping does not enter a building, up to the principal gas utilization equipment or the first fence (or wall) that surrounds that equipment. For the purpose of this section, "customer's buried piping" does not include branch lines that serve yard lanterns, pool heaters, or other types of secondary equipment."

   We have carefully reviewed this subsection and do not believe the customer notification process is required for the vast majority of IGU customers. IGU installs and maintains buried service lines up to the gas meter, typically located on the customer building. Thus, there is no portion of the buried service line that requires customer maintenance.

   IGU does acknowledge that, in the unusual circumstance where IGU's service line does not extend to the customer building, and where buried customer piping is necessary to reach to the first building or principal gas utilization equipment, then notification that IGU does not maintain the customer's buried piping is appropriate.

   Upon initially being advised that the customer notification could be a requirement, IGU performed the actions below to comply with the customer notification

requirements.

In January 2022, IGU developed a customer notification brochure to provide each new customer notification. See *Exhibit A: Customer Notification Brochure*. New customers come to IGU through two distinct mechanisms: (1) because IGU installed a new natural gas service line, or (2) because they bought or rented a building that is connected to natural gas. This brochure was inserted into every new customer first billing starting in January of 2022. From January 2022 to February 2023, nearly 1,200 brochures were sent to new customers.

In addition, all IGU customers, including those previously notified by brochure, received an email on March 17, 2023 (if an email address was on file) or a letter in the postal mail on March 20, 2023. The list included 3222 contacts, to include property owners and tenants when applicable. Documentation of customer notification is included as *Exhibit B: Customer Notification List*.

On March 20, 2023, IGU modified its New Service Agreement and its Transfer of Gas Service Application to include the following language: “Interior Gas Utility does not maintain the customers’ buried piping. If you have buried piping that is not monitored for corrosion or any other deficiencies that can compromise its integrity, and surveyed for leaks, it may be subject to the potential hazards of corrosion and leakage.” The new forms were added to *Exhibit B: Customer Notification List*. All IGU’s new customers will now, going forward, be notified that IGU does not maintain customer buried piping at the time-of-service initiation or transfer.

2. § 192.283 Plastic pipe: Qualifying joining procedures.

“IGU did not qualify its joining procedures as required in § 192.283. However, the Operator did not have a copy of a record demonstrating that testing and qualification of the joining procedures were completed by either the manufacturer or IGU.”

IGU Response:

HDPE is a thermoplastic pipe and therefore heat fusion joining procedures are subject to the Sustained Pressure Test or the Minimum Hydrostatic Burst Test according to a listed specification (e.g., ASTM 638-03 Standard Test method for Tensile properties of Plastics and ATSTM 2517-00). Electrofusion joining procedures are subject to Tensile Strength Test or Joint Integrity Test. For lateral pipe connections (e.g., electrofusion tees), the electrofusion procedure is qualified by forcing at right angles until failure, whereupon a failure outside of the joint area

qualifies the procedure. For non-lateral pipe joining procedures (e.g. couplings), the test specimen is subject to tensile strength test.

IGU has relied upon manufacturer's literature and statements that the procedures conform to 49 CFR §192.283. See *Exhibit C: Performance Pipe Fusion and Joining Procedure* and *Exhibit D: JM Eagle Fusion and Joining Procedure*.

IGU will update our standard operating procedures and/or records to ensure manufacturer's recommended pipe joining procedures demonstrate compliance with §192.283 by June 1, 2023.

3. § 192.453 General.

"IGU did not have any personnel who were qualified to conduct atmospheric corrosion inspections."

IGU Response:

IGU contests this allegation, elects not to have a hearing, and provides explanation.

IGU does conduct periodic inspection for corrosion each 3 years for above ground distribution piping within our storage site using NACE certified inspectors. See *Exhibit E: Coffman Engineers Cover Page and Signature Page.*

Additionally, in 2022 IGU trained and qualified personnel to inspect for atmospheric corrosion on above ground piping in the vicinity of the customer's gas meter installations. The inspection for atmospheric corrosion is included with meter inspections. See *Exhibit F: Corrosion Inspection Training.*

IGU also provides initial operator training using an on-line tool known as eWebOQ. Approximately 80 training modules are utilized. As of March 2023, we have verified and included eWebOQ Course 500 Atmospheric Corrosion training for all assigned distribution operators and supervisors, who have responsibility to conduct atmospheric corrosion inspections. See *Exhibit G: eWebOQ 500 Atmospheric Corrosion.* We will complete this initial training for all other assigned storage site operators and supervisors by June 1, 2023.

Additionally, IGU will review our standard operating procedures to ensure there is language specifying that only training and qualified personnel may conduct atmospheric corrosion inspections. This will be completed by June 1, 2023.

4. § 192.481 Atmospheric corrosion control: Monitoring.

"IGU personnel did not inspect and evaluate IGU's aboveground piping for atmospheric corrosion at the intervals required."

IGU Response:

IGU contests this allegation and requests a hearing regarding that the inspections did not occur and amount of the proposed penalty.

IGU respectfully requests that this civil penalty be waived and that any continuing enforcement action be limited to a compliance order. Alternatively, IGU would request that penalties be suspended and reconsidered after completion of work under a compliance order.

IGU has completed atmospheric corrosion inspections on above ground distribution piping within IGU's storage sites per the corrosion inspections conducted by Coffman Engineers each 3 years. See *Exhibit H: Coffman Engineers Corrosion Inspections*. This demonstrates compliance with a portion of IGU's aboveground piping.

IGU typically has included inspection for atmospheric corrosion during meter inspections, which also include other tasks such as leak checks, damage, meter protection, regulator installation, etc. IGU did observe and remediate atmospheric corrosion in past years, though not well documented because these efforts were combined with routine meter inspections. At the time of the August 2021 inspection, IGU recognized the need to strengthen the training and record keeping for atmospheric corrosion. IGU completed 63 meter inspections in 2021, and 1024 meter inspections in 2022. Approximately 600 meter inspections are planned for 2023. An example of our meter inspection form, including inspection for corrosion is attached. See *Exhibit I: Meter Inspection and Remediation Forms*.

IGU's experience has been that all cases of observed atmospheric corrosion is light surface oxidation only, which have not caused gas leaks. This is due to our relatively dry cold climate, selection of materials, and the use of anodeless risers.

IGU's underground distribution piping in Fairbanks and North Pole is 100% HDPE. There is no cast iron or ductile iron gas pipe in the system. There are no cathodically protected steel pipe segments anywhere in the distribution systems. The areas subject to atmospheric corrosion are above ground connections to gas meters and our above ground distribution pressure regulating stations within our storage sites.

Our environmental conditions do not readily promote atmospheric corrosion on above ground piping. IGU's experience has been that only light surface oxides tend to form over time on schedule 40 steel pipe and it does not need to be protected. We also contract with a NACE certified engineering consultant to inspect for corrosion at our distribution pressure regulating stations every three years.

IGU did take immediate corrective action following the August 2021 PHMSA inspection and prior to receipt of an NOPV. Actions included training of personnel, development of forms to document inspection and repairs, and development of a database to track the date of each location inspected and reveal when the next inspection is required.

We have created and monitor a database so that where atmospheric corrosion is observed, it can be repaired, if needed, and re-inspected within 3 years, as required. All other service line locations will be inspected every five years. There are new service locations within the last five years that did not require inspection until 2023. The NOPV does not acknowledge this fact.

IGU did take immediate corrective action following the August 2021 PHMSA inspection and prior to receipt of an NOPV. Actions included training of personnel, development of forms to document inspection and repairs, and development of a database to track the date of each location inspected and reveal when the next inspection is required.

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

"IGU failed to perform emergency response training as described in its Standard Operating Procedure (SOP) D-1105. IGU's emergency response training records documented the training that was completed but did not include company-wide training for "tabletop" emergency scenarios, as required by SOP D-1105."

"IGU did not follow its procedures to ensure that its Odorator/DTEX tools were calibrated for the sampling completed on the Fairbanks distribution system."

IGU Response:

These issues have been corrected. IGU completed company-wide table-top training on emergency response in April 2022. We will conduct similar training in 2023 by June 1, 2023. See Exhibit J: Emergency Response Training.

The DTEX meter was calibrated by the manufacturer on Mar 11, 2021. The IGU

employee responding at the time of inspection was not aware of this calibration. It is next due April 2023. See *Exhibit K: DTEX Calibration Certificate*.

6. § 192.625 Odorization of gas.

"IGU did not conduct periodic sampling to assure the proper concentration of odorant in the North Pole distribution system."

IGU Response:

IGU contests this allegation and requests a hearing regarding that the inspection did not occur and amount of the proposed penalty.

IGU respectfully requests that proposed civil penalties be waived and any further enforcement action be limited to compliance order. Alternatively, IGU would request that penalties be suspended and reconsidered after completion of work under a compliance order.

Prior to introducing natural gas into the North Pole distribution system, the Milton Roy/YZ manufactured odorizing equipment at the North Pole storage site was inspected and serviced by a Milton Roy technician in November 2020 to ensure it was working correctly. *See Exhibit L: Site 4 YZ Odorant System Service.*

During initial purging the North Pole distribution system with gas in Feb 2021, IGU plans included to verifying the presence of odorant and records show that odorant was detected at numerous locations throughout the system. In most cases, the odorant was noted as "strong." See *Exhibit M: North Pole Distribution Purging*. IGU is confident that adequate concentrations of odorant were and are injected into the distribution system.

Our first customer at 1224 North Star Drive was provided service on Feb 20, 2021. Our current distribution supervisor distinctly remembers testing that location with the DTEX unit, because he lives at that address. His recollection is that the DTEX meter indicated sufficient odorization. Unfortunately, no written record was retained.

Following that, our operations supervisor has attested that gas operators were dispatched to collect weekly odorant concentrations at 1224 North Star Drive. The written records of these testing results have not been located. Our supervisor has stated that these written records may have been lost. He specifically recalls that

because of low and/or high measurements, adjustments to the dosage odorant operating system were made. See *Exhibit N: Storage Site Supervisor Statement.*

Odorant checks for North Pole were added to the log in August 2021 and since then we have a significantly improved record of weekly odorant concentration measurement. See *Exhibit O: Weekly Odorant Checks.* Based on our experience and efforts to date, we are confident that IGU maintained the required concentrations of odorant in the North Pole distribution system since startup.

7. § 192.739 Pressure limiting and regulating stations: Inspection and testing.

"IGU did not complete the required inspection and testing at pressure limiting and regulator station at Site 1 in 2020. IGU did not provide records demonstrating that pressure regulators at Site 1 were inspected in 2020."

IGU Response:

IGU contests this allegation and requests a hearing regarding that the inspection did not occur and amount of the proposed penalty.

Based on prior and current records, IGU respectfully requests that the proposed civil penalty be waived, and any further enforcement be limited to compliance order. Alternatively, IGU would request that penalties be suspended and reconsidered after completion of work under a compliance order.

At storage site 1, the pressure-limiting and regulation station equipment consists of regulators known as REG 600, REG 640 and REG 650. It has been our usual and customary procedure to inspect and test these devices each year to ensure that they are in good mechanical condition, have adequate reliability, are appropriately set to control or relieve pressure, and are protected to prevent improper operation.

Although at the time of the August 2021 inspection, we were not able to provide a record of inspection for 2020, we did have records of this inspection for preceding years. IGU's storage site supervisor has since provided records for years 2018, 2019, 2020, 2021, and 2022. To be clear, the record for 2020 was created after the PHMSA inspection, but the activity had timely taken place. See *Exhibit P: Site 1 Pressure Regulation Inspections*.

Additionally, IGU monitors the Fairbanks distribution pressure continuously. We do

not have any evidence/reports where the distribution pressure has exceeded our MAOP of 60 psig. Our Site 1 regulator station is typically set to maintain distribution pressure between 52 and 58 psig, depending on seasonal distribution demand variability. Therefore, we are confident that pressure limiting devices at Site 1 have been functioning appropriately.

8. § 192.743 Pressure limiting and regulating stations: Capacity of relief devices.

"IGU did not confirm the capacity of overpressure protection blowdown pressure relief valve PRV-600 by in-place testing or by review and calculations as required by § 192.743(a)."

IGU Response:

IGU does not contest this allegation and provides explanation.

This has been corrected. PRV 600, which is a pilot operated pressure relief valve, is believed to have been originally installed in 1998. Since then, there has not been significant changes to the process equipment at Site 1. The data plate on the device shows a capacity of 11,778 SCFM of air. The manufacturer's literature lists the capacity of natural gas as 9,125 SCFM at 60 psi. This has been accepted by IGU as having an adequate capacity for Site 1.

IGU has completed a capacity calculation that demonstrates the device is adequately sized. The calculation shows a required open area of 6.037 sq. in. whereas the device PRV 600 provides 6.38 sq. in. as per manufacturer's literature. See *Exhibit Q: PRV 600 Capacity Calculation*. IGU will continue to review this calculation annually and monitor for any process equipment changes.

9. § 192.747 Valve maintenance: Distribution systems.

"IGU did not conduct any distribution valve inspections in 2019. There were some 2020 records demonstrating that some distribution valves were inspected; however, IGU's distribution valve inspections focused on checking the conditions of the areas around valves and ensuring the valves were accessible but did not include checking the functionality and condition of the valves."

IGU Response:

IGU does not contest this allegation and provides explanation.

This has been corrected. See *Exhibit R 2022 Valve Inspections*.

It is our usual and customary procedure to inspect valves annually. In 2022, IGU thoroughly inspected and exercised each valve in the Fairbanks and North Pole distribution systems. At that time, there were no valves found inoperable, although there were a couple instances where an initial attempt to exercise the valve was difficult and a subsequent field trip was required to complete the task. In previous years, inspections that occurred during the winter months didn't include exercising the valve in attempt to avoid damage during peak heating season. In the future, all valve inspections will include exercising the valve.

10. § 192.756 Joining plastic pipe by heat fusion; equipment maintenance and calibration.

"IGU did not inspect and maintain their joining equipment as required by § 192.756."

IGU Response:

This has been corrected. In 2022, IGU performed manufacturer's maintenance procedures on pipe fusing machines. We contracted with a McElroy service provider who inspected and performed repair on our pipe fusion machines. Additionally, the service included maintenance training for gas operators.

11. § 192.1007 What are the required elements of an integrity management plan.

"IGU did not have a written procedure that described the integrity management risk ranking and evaluation process, and the IGU Engineering Department personnel who manage and administer IGU's Distribution Integrity Management Plan (DIMP) were not familiar with the Simple, Handy, Risk-based Integrity Management Program (SHRIMP) software and were unable to explain the risk reranking completed by IGU."

IGU Response:

IGU does not contest this allegation and provides explanation.

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The IGU engineer responsible for the evaluation of risks and ranking left IGU in March of 2021. At the time of the inspection, IGU had not yet fully trained other personnel in the management of the distribution and integrity program and SHRIMP. IGU will update our DIMP to include a procedure for ranking and evaluating risks. IGU will provide additional training to current personnel and provide an updated risk ranking and evaluation by August 1, 2023.

12. § 192.1007 What are the required elements of an integrity management plan.

"IGU did not implement measures designed to reduce the risks from failure of its gas distribution pipelines."

IGU Response:

The IGU engineer responsible for the DIMP left IGU in March of 2021. At the time of the inspection, IGU had not yet fully trained other personnel in the management of the distribution and integrity program and SHRIMP. IGU will provide additional training to current personnel and provide an updated plan to implement measures to address risks by August 1, 2023.

In closing our response, we would like to point out that none of these proposed violations resulted in any release of natural gas, unsafe operating conditions, incident, or accident.

Please contact us to discuss these matters further as needed. We would like to fully clarify any concerns or questions. IGU is committed to 100% PHMSA compliance. We value the inspection process as one important way we improve.

Sincerely,

Mark Rockwell

Mark Rockwell, PE
Director of Operations
Interior Gas Utility

Cc: Dan Britton, General Manager