WARNING LETTER

OVERNIGHT EXPRESS DELIVERY

March 27, 2020

Mr. Richard Keyser
Senior Vice President of Operations
Texas Gas Transmission, LLC
9 Greenway Plaza, Suite 2800
Houston, TX 77046

CPF 1-2020-1010W

Dear Mr. Keyser:

From March 25 – 28, 2019, June 3 – 6, 2019, and August 27 – 29, 2019, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected Texas Gas Transmission, LLC's (TGT) underground natural gas storage field records and procedures for the Graham Lake, Leesville, Midland, and West Greenville storage fields in Muhlenberg County, Kentucky and Lawrence County, Indiana.

As a result of the inspections, 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. § 192.12 Underground natural gas storage facilities.

(a) ….

(d) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer reservoir for gas storage, including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1171, sections 8, 9, 10, and 11 (incorporated by reference, see § 192.7) by January 18, 2018.[1]

[1] The final rule, Pipeline Safety: Safety of Underground Natural Gas Storage Facilities, 85 FR 8104 (February 12, 2020), revised § 192.12. This requirement is still present but is now codified in § 192.12(b)(2).

TGT failed to meet the requirements of API RP 1171, Section 10. Specifically, TGT failed to demonstrate that all applicable personnel were trained in its Emergency Response Plan and Well Control Plan in accordance with API RP 1171, Section 10.6.2 Training (Section 10.6.2).

Section 10.6.2 states in part:

> Storage operations and applicable staff shall receive training in the use of the emergency preparedness/response plan. The training can include mock drills and participation in table-top exercises at regular intervals. The table-top exercises or mock drills can include civil emergency responders to enhance understanding and successful incident response.

A review of TGT's written procedures established that TGT conducts this required training at an interval of annually, not to exceed 15 months. At the time of the inspection, TGT failed to provide adequate documentation verifying that all employees required to be trained had attended the training of the emergency preparedness/response plan for the Midland storage facility as required by API RP 1171, Section 10.6.2. TGT's attendance documentation for 2018 in Emergency Response Plan and Well Control Plan training did not include one (1) personnel listed on their organizational chart for Midland Storage.

Therefore, TGT failed to train all required personnel in 2018 in accordance with its established interval, as required by Section 10.6.2.

2. § 192.12 Underground natural gas storage facilities.

(a) ….

(d) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer reservoir for gas storage, including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1171, sections 8, 9, 10, and 11 (incorporated by reference, see § 192.7) by January 18, 2018.

TGT's failed to meet the requirements of API RP 1171, Section 9. Specifically, TGT failed to request third-party well integrity evaluation data, as required by API RP 1171, Section 9.3.1 Well Integrity Evaluation (Section 9.3.1).

Section 9.3.1 states in part:

> The operator shall evaluate the mechanical integrity of each active well, including each third-party well, that penetrates the storage reservoir and buffer zone or areas influenced by storage operations.

> Well integrity evaluation methods typically used by operators include but are not limited to review of design, completion, and well work records, wellhead and downhole inspection, well pressure monitoring and testing, and gas sampling.
>
> The operator shall request well integrity evaluation data from third-party well owner/operators following the frequency established using conclusions from the risk assessment.
>
> Active well mechanical integrity evaluations shall include initial and subsequent evaluations as determined using the risk assessment and the information derived from the initial evaluation:

During the inspections of the Graham Lake and West Greenville storage fields, TGT was asked to provide records showing that they had requested third-party well integrity information. TGT could not provide any records documenting that they requested this information. Therefore, TGT failed to meet the requirements of Section 9.3.1.

3. § 192.12 Underground natural gas storage facilities.

> **(a) …**
>
> **(d) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer reservoir for gas storage, including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1171, sections 8, 9, 10, and 11 (incorporated by reference, see § 192.7) by January 18, 2018.**

TGT failed to meet the requirements of API RP 1171, Section 8. Specifically, TGT failed to identify all threats to the well or the storage as required by API RP 1171, Section 8.4.2 Threat and Hazard Identification and Analysis (Section 8.4.2).

Section 8.4.2 states in part:

> The operator shall evaluate the potential threats and hazards impacting storage wells and reservoirs. The operator should refer to the list of common threats and hazards in Table 1 and may supplement the list in Table 1 with other hazards or threats identified by site-specific assessments.
>
> The operator should estimate risk from potential events that could occur related to potential threats and hazards to individual facilities, such as wells, and by region when considering the reservoir.
>
> The operator should assess potential threat and/or hazard interaction, such as the relationship of the threat of casing damage during well drilling or service work that could exacerbate corrosion processes.

During the Leesville Storage facility inspection, it was established that the facility has H2S gas as part of the gas being stored and gathered. TGT's Storage Integrity Program and Risk Management Model failed to include this hazardous gas as a threat to the storage and wells. Table 1 of API RP 1171 includes the threat of reservoir fluid compatibility issues with potential consequences of H2S generating bacteria, as well as internal corrosion that could result in well and/or pipeline repairs/failures.

4. § 192.12 Underground natural gas storage facilities.

(a) ….

(e) Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established pursuant to § 192.605.[2]

TGT failed to follow its written procedures for implementing the requirements of API RP 1171. Specifically, TGT failed to follow its Storage Integrity Program requirement that all personnel be informed of changes prior to implementing the change, in accordance with API RP 1171, Section 11.11.1 Management of Change (Section 11.11.1).

Section 11.11.1 states in part:

> Revision of procedures and processes is an acceptable practice, but the operator shall require changes to be accomplished in a controlled manner. The program documentation, framework, and procedures shall be revised before the change can be implemented. Not all changes need be approved through a formal Management of Change (MOC) process. Some changes are expected and may not be subject to a formal change control process. The operator should define the types of changes determined to be significant and requiring a MOC.

During the inspection, it was established that TGT's MOC required that all new procedures required training or notification. Specifically, the new Form 1500-18 was created to require personnel to perform additional preventive and mitigative measures (P&M) for wells that did not have taps on their wells. When the MOC documentation was examined, there were operating areas that had not received training or notification in this new procedure. However, it was being used at the Graham Lake and West Greenville area, and thus the change was implemented prior to all parties being trained or notified on the new form.

Therefore, TGT failed to follow its written procedures for implementing the requirements of API RP 1171 regarding MOC.

[2] The final rule, Pipeline Safety: Safety of Underground Natural Gas Storage Facilities, 85 FR 8104 (February 12, 2020), revised § 192.12. This requirement is still present but is now codified in § 192.12(c).

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed $213,268 per violation per day the violation persists, up to a maximum of $2,132,679 for a related series of violations. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed $209,002 per violation per day, with a maximum penalty not to exceed $2,090,022. For violations occurring prior to November 2, 2015, the maximum penalty may not exceed $200,000 per violation per day, with a maximum penalty not to exceed $2,000,000 for a related series of violations. 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 Texas Gas Transmission, LLC being subject to additional enforcement action.

Please 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).

No reply to this letter is required. If you choose to reply, please submit all correspondence in this matter to Robert Burrough, Director, PHMSA Eastern Region, 840 Bear Tavern Road, Suite 300, West Trenton, NJ 08628. Please refer to **CPF 1-2020-1010W** on each document you submit, and whenever possible provide a signed PDF copy in electronic format. Smaller files may be emailed to robert.burrough@dot.gov. Larger files should be sent on USB flash drive accompanied by the original paper copy to the Eastern Region Office.

Sincerely,

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