



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
609.771.7800

NOTICE OF AMENDMENT

OVERNIGHT EXPRESS DELIVERY

January 2, 2020

Mr. Stan Chapman
Executive Vice President
Columbia Gas Transmission, LLC
700 Louisiana St.
Houston, TX 77002

CPF 1-2020-1005M

Dear Mr. Chapman:

From September 16-19, 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 Columbia Gas Transmission, LLC's (Columbia) procedures for Underground Natural Gas Storage in Charleston, West Virginia.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within Columbia's plans or procedures, as described below:

1. § 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.

Columbia's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, Columbia's Gas Storage Well Integrity Assessment Section 2.1.11 - Performance Measures and Continual Improvement procedures did not require a continual review and improvement cycle in accordance with API RP 1171, Section 8.7.1 General (Section 8.7.1).

Section 8.7.1 states in part:

The operator shall assess the effectiveness of risk monitoring and risk management programs and maintain a continual review and improvement cycle in risk management activities to provide functional integrity of the storage operation.

At the time of the inspection, Columbia's procedures stated that a review for continual improvement "should" be done every three years. Columbia did not address that a continual review and improvement cycle is required in accordance with Section 8.7.1.

2. **§ 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.

Columbia's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, Columbia's Gas Storage Well Integrity Assessment Section 2.1.11 - Performance Measures and Continual Improvement procedures did not require an assessment of the effectiveness of risk monitoring and risk management programs in accordance with API RP 1171, Section 8.7.1 General (Section 8.7.1).

Section 8.7.1 states in part:

The operator shall assess the effectiveness of risk monitoring and risk management programs and maintain a continual review and improvement cycle in risk management activities to provide functional integrity of the storage operation.

At the time of the inspection, Columbia's procedures stated that a review for effectiveness "should" be done every three years. Columbia did not address that an effectiveness review is required in accordance with Section 8.7.1.

3. **§ 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.

Columbia's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, Columbia's Gas Storage Well Integrity Assessment Section 2.1.11 - Performance Measures and Continual Improvement procedures did not define a review frequency for the risk assessment in accordance with API RP 1171, Section 8.7.2 Frequency (Section 8.7.2).

Section 8.7.2 states in part:

The operator shall define a review frequency for the risk assessment and perform a review and update of the risk assessment in accordance with the defined frequency.

At the time of the inspection, Columbia's procedures stated that a review "should" be done every three years. Therefore, Columbia did not establish a defined frequency in accordance with Section 8.7.2.

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.

Columbia's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, Columbia did not have a process to request well integrity evaluation data from third-party well owner and operators 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 request well integrity evaluation data from third-party well owner/operators following the frequency established using conclusions from the risk assessment.

At the time of the inspection, Columbia did not have a process in place to request third-party data in accordance with Section 9.3.1.

5. **§ 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.

Columbia's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, Columbia did not have a process to monitor for the presence of annular gas by measuring and recording annular gas flow as required by API RP 1171, Section 9.3.2 Well Integrity Monitoring (Section 9.3.2).

Section 9.3.2 states in part:

The operator shall monitor for presence of annular gas by measuring and recording annular pressure and/or annular gas flow.

At the time of the inspection, Columbia did not have a process to monitor for the presence of annular gas by measuring and recording annular gas flow in accordance with Section 9.3.2.

6. **§ 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.

Columbia's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, Columbia did not have a process to define a threshold or limit for the annular gas flow as required by API RP 1171, Section 9.3.2 Well Integrity Monitoring (Section 9.3.2).

Section 9.3.2 states in part:

The operator shall evaluate each annular gas occurrence that exceeds operator- or regulatory-defined threshold levels determined from well integrity evaluation and from risk assessment.

At the time of the inspection, Columbia did not have a process to define a threshold or limit for the annular gas flow in accordance with Section 9.3.2.

7. **§ 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.

Columbia's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, Columbia did not have a process to evaluate each annular gas occurrence that exceeds operator defined thresholds as required by API RP 1171, Section 9.3.2 Well Integrity Monitoring (Section 9.3.2).

Section 9.3.2 states in part:

The operator shall evaluate each annular gas occurrence that exceeds operator- or regulatory-defined threshold levels determined from well integrity evaluation and from risk assessment.

At the time of the inspection, Columbia did not have a process to evaluate each annular gas occurrence that exceeds operator defined thresholds in accordance with Section 9.3.2.

8. § 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.

Columbia's written procedures for implementing the requirements of API RP 1171 were inadequate. Specifically, Columbia did not have a process to annually test the operation of the master valve and wellhead pipeline isolation valve for the ability to isolate the well as required by API RP 1171, Section 9.3.2 Well Integrity Monitoring (Section 9.3.2).

Section 9.3.2 states in part:

The operator shall test the operation of the master valve and wellhead pipeline isolation valve at least annually for proper function and ability to isolate the well.

At the time of the inspection, Columbia did not have a process to annually test the operation of the master valve and wellhead pipeline isolation valve for the ability to isolate the well in accordance with Section 9.3.2.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.206. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. 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

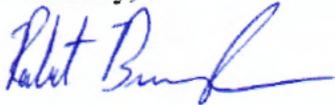
treatment under 5 U.S.C. 552(b).

Following the receipt of this Notice, you have 30 days to submit written comments, revised procedures, or a request for a hearing under §190.211. If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue an Order Directing Amendment. If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.206). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Columbia Gas Transmission, LLC maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Robert Burrough, Director, PHMSA Eastern Region, 840 Bear Tavern Road, Suite 300, West Trenton, NJ 08628. Please refer to **CPF 1-2020-1005M** 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.

Additionally, if you choose to respond to this (or any other case), please ensure that any response letter pertains solely to one CPF case number.

Sincerely,



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

Enclosure: *Response Options for Pipeline Operators in Enforcement Proceedings*