



U.S. Department
of Transportation

Pipeline and
Hazardous Materials
Safety Administration

820 Bear Tavern Road, Suite 103
West Trenton, NJ 08628
609.771.7800

NOTICE OF AMENDMENT

OVERNIGHT EXPRESS DELIVERY

May 9, 2017

Mr. Mark Cluff
VP Safety & Operational Discipline
Transcontinental Gas Pipe Line Company
One Williams Center
Tulsa, OK 74172

CPF 1-2017-1013M

Dear Mr. Cluff:

Between May 23, 2016 and October 28, 2016, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, inspected Transcontinental Gas Pipe Line Company's (Transco) plans and procedures as part of an integrated inspection of Transco's Charlottesville and Princeton Divisions.

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

1. **§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. ...
 - (b) **Maintenance and normal operations.** The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations. ...
 - (1) Operating, maintaining, and repairing the pipeline in accordance with each of the

requirements of this subpart and subpart M of this part.

Transco's written procedure 70.14.01, *Pipeline Repair*, Rev. 23, dated 11/09/16, is inadequate in that it contains conflicting information regarding methods of repair to be utilized for certain defects.

Table 1 of Transco's procedure 70.14.01, *Pipeline Repair*, Rev. 23, dated 11/09/16, summarizes the repair options available for various types of defects. Section 5.1.1 of this procedure instructs the Asset Integrity Manager to "Determine the appropriate repair method according to Table 1".

The information in Table 1 conflicts with the options provided in the rest of the procedure regarding repair options for external corrosion defects that are greater than 80% of the wall thickness, but not leaking. The Table indicates that the preferred method for repairing these defects is a Type "A" Sleeve or Cut Out. For Type "B" Sleeves it states that they are "optional/not recommended" as a repair method.

Figure 4 of the procedure provides a decision flow chart for repairing corrosion defects. Following through the flowchart, it indicates the repair options when less than 20% of the wall thickness remains at a corrosion anomaly are a Type "B" Sleeve or Cut Out.

Finally, Section 4.1.2.3 of the procedure states the following when evaluating corrosion:

"If the remaining wall thickness is less than 20% of nominal, cut out and replace as a cylinder or install a type "B" sleeve."

The information in Table 1 conflicts with the flowchart found in Figure 4 and with Section 4.1.2.3 of the procedure. As Table 1 is to be used as reference by the Asset Integrity Manager in determining the appropriate repair method for a defect under section 5.1.1, there should be no conflict between its contents and the repair methods recommended by other portions of the procedure.

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. ...

(b) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations. ...

(1) Operating, maintaining, and repairing the pipeline in accordance with each of the requirements of this subpart and subpart M of this part.

Transco's written Policy 70.16.00.07, *DOT Valve Maintenance*, Rev. 7, dated 12/31/2012, is inadequate in that it does not provide sufficient detail for meeting the requirements of 192.745(a).

§192.745(a) states in part: "Each transmission line valve that might be required during an

emergency must be inspected and partially operated...”

During the inspection, the PHMSA inspectors reviewed Transco’s valve inspection records and Transco’s Operation and Maintenance (O&M) procedures.

Transco’s Policy 70.16.00.07 *DOT Valve Maintenance* states in part:

“1.2 It is the policy that the District maintains a list of DOT valves.

1.2.1 Depending on the facilities in the District, this list may include the following valves that could be utilized during an emergency:

- Compressor Station Block Valves
- Compressor Station Side Gate Valves
- Compressor Station Blowdown Valves
- Mainline and Lateral Block Valves
- Mainline and Lateral Crossover Valves (between parallel lines)
- Mainline and Lateral Block B1 and B2 Valves (bypass)
- Meter Station Tap Valves
- Automatic ESD Station Fuel Gas Supply Valves
- Offshore Platform Isolation Valves
- Offshore Platform Blowdown Valves

...

3.1 The District Manager is responsible for compliance with this policy throughout their assigned geographic region.”

The procedure and policy failed to provide details, such as:

1. Criteria/process for the emergency valve designation process
2. Individuals responsible for developing the valve designation criteria
3. Process for keeping the list of emergency valves current
4. Documentation requirements
5. Process to review records for completeness and accuracy

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. ...

(b) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations. ...

(2) Controlling corrosion in accordance with the operations and maintenance requirements of Subpart I of this part.

Transco's written procedures for corrosion control, including 20.06.03, *Cathodic Protection Criteria*, Rev. 13, dated 03/27/2013, and 20.07.01, *Annual Cathodic Protection Surveys*, Rev. 14, dated 1/30/2013, fail to address the requirements of 192.463(c). Specifically, they are inadequate in that they do not contain information such as criteria, investigation or remedial measures regarding excessive polarization or overprotection of facilities.

Procedures for controlling corrosion in accordance with the requirements of Subpart I are required under §192.605(b)(2). §192.463(c), found in Subpart I of 49 C.F.R. Part 192, requires that "The amount of cathodic protection must be controlled so as not to damage the protective coating or the pipe."

The procedures do not include sufficient guidance on controlling the amount of cathodic protection, such as:

1. Criteria for what indicates over voltage, such as a threshold polarized potential;
 2. A process for determining if indications of over voltage are a threat to the integrity of a pipeline or its protective coating; and
 3. Remedial actions if the over voltage is determined to be a threat to the pipeline or its protective coating.
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. ...

(b) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations. ...

(2) Controlling corrosion in accordance with the operations and maintenance requirements of Subpart I of this part.

Transco's written procedure 20.53.04, *Insulating Flange Testing*, Rev. 6, dated 2/25/2013, is inadequate in that it fails to provide sufficient guidance with regards to §192.467(d). Specifically, it does not provide guidance consistent with Transco's current practices for determining when further testing is required after a potential, unintentional short is discovered.

Procedures for controlling corrosion in accordance with the requirements of Subpart I are required under §192.605(b)(2). §192.467(d), found in Subpart I of 49 C.F.R. Part 192, requires that "Inspection and electrical tests must be made to assure that electrical isolation is adequate."

Transco's procedure 20.53.04, dated 2/25/2013, Section 2.2 states in part "Consider further testing as outlined in the following processes in this procedure if the IR drop is less than 100 mV" when testing IR drop across an insulating flange. The procedure lacks specificity on how it is determined that further testing is needed. Transco personnel indicated that after a potential, unintentional short at an electrical insulating flange is discovered based on an IR drop across it of less than 100 mV,

no further testing or other actions are performed if the cathodic protection levels remain adequate (pass utilized cathodic protection criteria). The procedure does not include sufficient guidance for making this determination.

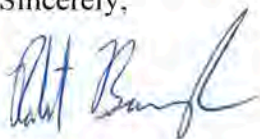
Response to this Notice

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 Compliance 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 60 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 Transco 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, Acting Director, PHMSA Eastern Region, 820 Bear Tavern Road, Suite 103, West Trenton, NJ 08628. In correspondence concerning this matter, please refer to **CPF 1-2017-1013M**, and for each document you submit, please provide a copy in electronic format whenever possible. Smaller files may be emailed to robert.burrough@dot.gov. Larger files should be sent on a CD accompanied by the original paper copy to the Eastern Region Office.

Sincerely,



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

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