U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

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NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER

OVERNIGHT EXPRESS DELIVERY

January 18, 2018

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

CPF 1-2018-1002

Dear Mr. Cluff:

Between May 23, 2016 and October 28, 2016, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), and inspectors from the New York State Department of Public Service (NYSDPS), acting as agents of PHMSA, pursuant to Chapter 601 of 49 United States Code performed an integrated inspection of Transcontinental Gas Pipe Line Company's (Transco) Princeton and Charlottesville Divisions, located throughout Pennsylvania, New York, New Jersey, Maryland, Delaware, Virginia, North Carolina and South Carolina.

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. The items inspected and the probable violations are:

1. **§192.481 Atmospheric corrosion control: Monitoring**

   (a) Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

If the pipeline is located:	Then the frequency of inspection is:
Onshore	At least once every 3 calendar years, but with intervals not exceeding 39 months

Transco failed to inspect each onshore pipeline or portion of a pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion at a frequency of at least once every 3 calendar years, but with intervals not exceeding 39 months. Specifically, Transco inspected the above ground facilities for atmospheric corrosion at their Compressor Station 185 on an interval of 40.5 months between 2011 and 2014, exceeding the code requirement by 1.5 months.

During the inspection, the PHMSA inspector reviewed the last 2 cycles of atmospheric corrosion inspection reports, occurring in 2011 and 2014, throughout Transco's system. These records show that Transco failed to inspect 27 valves at Compressor Station 185, located in their Virginia North district, within 39 months of the previous atmospheric corrosion evaluation. Atmospheric corrosion evaluations were performed on 4/14/2011 and 8/28/2014, an interval of approximately 40.5 months.

2. **§192.603 General provisions**

   ...

   (b) Each operator shall keep records necessary to administer the procedures established under §192.605.

Transco failed to keep records necessary to administer the procedures established under § 192.605. Specifically, in four instances Transco failed to keep records of change of class location studies conducted in accordance with § 192.609.

Section 192.605 - Procedural manual for operations, maintenance, and emergencies, found in subpart L of 49 CFR 192, states:

"...

(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"

Section 192.609 Change in class location: Required study, found in subpart L of 49 CFR 192, states:

"Whenever an increase in population density indicates a change in class location for a segment of an existing steel pipeline operating at a hoop stress that is more than 40 percent of SMYS, or indicates that the hoop stress corresponding to the established maximum allowable operating pressure for a segment of existing pipeline is not commensurate with the present class location, the operator shall immediately make a study to determine;

(a) The present class location for the segment involved.

(b) The design, construction, and testing procedures followed in the original construction, and a comparison of these procedures with those required for the present class location by the applicable provisions of this part.

(c) The physical condition of the segment to the extent it can be ascertained from available records;

(d) The operating and maintenance history of the segment;

(e) The maximum actual operating pressure and the corresponding operating hoop stress, taking pressure gradient into account, for the segment of pipeline involved; and,

(f) The actual area affected by the population density increase, and physical barriers or other factors which may limit further expansion of the more densely populated area."

In April 2016, during PHMSA's inspection at Transco's Headquarters, the PHMSA inspector requested MAOP verification documents for pipeline segments in 11 different PHMSA inspection units. Transco provided the PHMSA inspector with electronic copies of the pipeline data, the current MAOP, and the Class location for each of the pipeline segments.

The original construction records reviewed indicate that Transco is operating at a hoop stress that is one class above what the documents could verify in four of the segments:

1. The Penn Leidy-East IU 2841: Leidy A Line MP 55.12 segment's hoop stress was determined to be commensurate with a Class 1 location but is now a Class 2 location.
2. The Pennsylvania-Southeast IU 2831: Mainline B MP 1749.7678 – 1751.0338 segment contains two separate MAOPs for pipelines installed in 1969 and 1990. The hoop stress for the 1969 pipeline segment was determined to be commensurate with a Class 2 location but is now a Class 3 location.
3. The Maryland IU 2881: Mainline C MP 1645.6945 – 1646.1291 segment's hoop stress was determined to be commensurate with a Class 2 location but is now a Class 3 location.
4. The Virginia-South IU 2871: Mainline A MP 1463.7108 – 1463.7295 segment's hoop stress was determined to be commensurate with a Class 1 location but is now a Class 2 location.

Transco could not produce records of the Change in Class Location: Required Study Documents as required in § 192.609 Change in class location: Required study.

In an email dated September 19, 2016, PHMSA asked Transco for class location history for the Pennsylvania - Southeast segment in IU 2831. Transco responded as follows:

"We are not able to show the class location history prior to recent years. Our current pipeline safety group has retained the records since early 2000s. The pipeline segment in question has not changed since that time. We have spent considerable time searching for historical class info but so far the efforts have not yielded any good information."

In an email December 22, 2016, PHMSA asked Transco for the § 192.609 Change in Class location: Required study for each of these four pipeline segments. Transco responded as follows:

"Unfortunately the response below will be the same for each of these segments. I reviewed the dates involved and there will not be records to show when exactly the class changed in these locations."

Thus, Transco failed keep records necessary to administer required procedures regarding class location studies, pursuant to § 192.609.

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.

Transco failed to follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. Specifically, Transco failed in 26 locations to follow its written procedure 20.13.01, *Atmospheric and Offshore Splash Zone Corrosion Inspections*, Rev. 1, dated 12/31/2012, (Procedure) section 3.4, pursuant to § 192.481(b).

Transco's Procedure, section 3.3 states: "It is required that certain piping subject to atmospheric inspections be given special consideration such as under insulation, at pipe supports, in splash zones, at deck penetrations, and in spans over water."

Section 3.4 states "Each location with piping that requires special consideration shall maintain an inspection plan for all piping that requires special consideration. The plan should be reviewed and updated during the triennial onshore (or annual offshore) inspection.

The inspection plan should include as applicable:

- List of all possible threats, external corrosion, and or internal issue.
- List of the areas that require special consideration.
- Documentation of each inspected location, including photos of each site – good and bad, before and after if remediated.
- List of piping that is insulated.
- Any other technology assessment method that is utilized such as guided wave or eddy current."

Sections 3.6 to 3.8 describe the specific requirements regarding pipe support removal and insulation removal at these locations of special consideration.

During the field inspections conducted from July 11, 2016 to October 28, 2016, the PHMSA inspector visited various above ground facilities located throughout Transco's system in Pennsylvania, New Jersey, Virginia, North Carolina and South Carolina. The inspector noted above ground piping with insulation throughout these areas, including compressor, regulator and metering stations.

The PHMSA inspector requested site-specific inspection plans, as required by Section 3.4 in the above procedure. Transco Asset Integrity personnel stated that the plans did not exist.

Subsequently, Transco indicated that the inspection plans required by its procedures were being drafted. In an email dated December 20, 2016, Transco identified 26 locations requiring inspection plans, all in various stages of completion.

Thus, Transco failed to follow its Procedure regarding inspection plans for atmospheric corrosion inspections in locations of special consideration.

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.

Transco failed to follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. Specifically, Transco failed to follow its written procedure 20.07.01, *Annual Cathodic Protection Surveys*, Rev. 14, dated 1/30/2013, (Procedure), pursuant to § 192.467(d).

Section 192.467(d) states "Inspection and electrical tests must be made to assure that electrical isolation is adequate."

Transco's Procedure Section 2, *Perform the Annual Cathodic Protection Survey*, paragraph 2.9 states:

"Gather and record a P/S potential reading on the Company side of the electrical isolating flange or critical isolating union, and an open circuit potential across the flange or unions to check the effectiveness of isolation."

During the inspection, the PHMSA inspector reviewed annual cathodic protection survey records for 2014, 2015, and 2016, for the Penn Leidy West and NJ South districts. The records reviewed showed multiple electrical isolating devices with no open circuit potentials recorded during the 2014 and/or 2015 annual cathodic protection surveys. There were 13 instances where open circuit potentials were not recorded at 11 unique electrical isolating devices. These locations included 8 with "IF", "INFG" or "Flange" in the location name, indicating the presence of an insulating flange for electrical isolation. Additionally, 3 locations whose names do not include these terms were confirmed to have insulating flanges present via an information request received from Transco on January 3, 2017. Finally, the records also included boxes under the "OCP" column at these 11 test points, indicating an open circuit potential is expected by their database but not present.

Thus, Transco failed to gather and record open circuit potentials at all electrical isolation devices during the annual cathodic protection surveys as required by its Procedure.

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.

Transco failed to follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. Specifically, Transco failed to follow its written procedure 20.07.01, *Annual Cathodic Protection Surveys*, Rev. 14, dated 1/30/2013, (Procedure), pursuant to § 192.473(a).

Section 192.473(a) states "Each operator whose pipeline system is subjected to stray currents shall have in effect a continuing program to minimize the detrimental effects of such currents."

Transco's Procedure Section 2, *Perform the Annual Cathodic Protection Survey*, paragraph 2.8 states in part:

"Gather and record P/S potential readings for both the Company and the foreign structure at each foreign pipeline crossing where interference has been identified or is suspected, and where test leads or test stations are available. NOTE: The foreign structure reading is intended for the determination of possible interference…."

During the field inspection of the Penn Leidy West district, the PHMSA inspector reviewed Annual Cathodic Protection Survey records for 2014, 2015, and 2016 for piping between Compressor Stations 535 and 520. The records show multiple test stations labeled as foreign pipeline crossings, as indicated by the use of "X-ing" in the test point location name, where foreign pipeline readings were not recorded during the 2014, 2015, and/or 2016 annual surveys. Boxes were also found for some test points within the "OCP" column to indicate an open circuit potential is expected by their database but not present.

In an email from the Supervisor of Asset Integrity for Transco's Princeton Division dated 11/1/2016, Transco stated: "Looking back over the records the database does not have Foreign Pipe to Soils for this area. We had always used an Open Circuit Potential between Transco and the Foreign Company to determine if there was an interference problem. We recognize that we did not record those readings in 2014 and are in the process of making sure what has been found in the audit does not become an issue again."

The records demonstrated a total of 76 instances at 33 unique pipeline crossing test points where foreign pipeline readings were not recorded during a calendar year.

Thus, Transco failed to gather and record pipe-to-soil potential readings for the foreign structure at each foreign pipeline crossing where interference has been identified or suspected, as required by its Procedure.

6. **§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.

Transco failed to follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. Specifically, Transco failed to follow its written procedure 70.11.01, *Performing Transmission Line Leak Surveys*, Rev. 13, dated 12/31/2012, (Procedure 70.11.01), and its written procedure 07.16.01.02, *Performing Pipeline Leak Surveys*, Rev. 01, dated 6/8/2015, (Procedure 07.16.01.02), pursuant to § 192.709(c).

Section 192.709(c) states "A record of each patrol, survey, inspection, and test required by subparts L and M of this part must be retained for at least 5 years or until the next patrol, survey, inspection, or test is completed, whichever is longer."

Procedure 70.11.01, Section 5.0 states:

> "5.1 Complete form WGP-0045, "WilSOP Land Patrol Report Form," for leak surveys and document any necessary corrective action.
>
> 5.2 Upon conclusion of an inspection and/or corrective action required as a result of a condition identified during a leak survey, complete forms WGP-0092, "WilSOP Pipeline and Inspection Repair Report," and WGP-0231, "WilSOP Leak Report Form," if applicable.
>
> 5.3 Complete documentation as specified in WilSOP O&M 70.14.00, "Pipe and Fitting Leak and Defect Repair," if applicable."

Procedure 07.16.01.02, Section 6.1, states:

> "Action: Document the results of the leak survey by completing F07-155 – Pipeline Patrol and Leak Survey Report."

During the inspection, the PHMSA inspector reviewed Leak Survey records for 2013 through 2016 for the North Carolina/South Carolina and the Virginia – South districts.

Aerial leak surveys for the Compressor Station 150 in the NC/SC district were conducted on 10/22/2013, 5/13/2014, and 10/27/2014. The records indicated the following:

1. All of the surveys were documented on form WGP-0045.
2. The remarks section of the surveys completed on 10/22/2013 and 5/13/2014 noted "Valve Operator Leak in Station 150 Yard" and "Valve Operator in Station 150 Yard" at MP 1287.11:
3. The remarks section of the survey completed on 10/27/2014 did not make any reference to the "Valve Operator Leak in Station 150 Yard" at MP 1287.11 that was noted in the 10/22/2013 and 5/13/2014 surveys.

The PHMSA inspector requested documentation of corrective action related to the valve operator leak. Transco did not have documentation as required by Procedure 70.11.01.

The leak survey records in the Virginia – South district indicated that during a 9/3/2015 aerial leak survey 4 values recorded above thresholds were reported on the New Era Technology, Inc. Preliminary Report. This aerial leak survey was performed as a post-construction survey for the South Virginia Lateral B. Transco could not provide any F07-155 records (or Form WGP-0045 records from the prior procedure) that documented the investigation or corrective actions related to these indications. In an email dated December 5, 2016 from the Transco Senior Operations Manager for Virginia - South district, it was stated that Transco "…verified that CS 165 has no

corresponding Form F07-155 Pipeline Patrol and Leak Survey Report…" for the indications found in the New Era Report.

Thus, Transco failed to document the leak survey results, indication investigations and/or corrective actions taken on Form WGP-0045, "WilSOP Land Patrol Report Form" or F07-155, "Pipeline Patrol and Leak Survey Report", in the instances of leak survey above.

7. **§192.709 Transmission lines: Record keeping.**

   Each operator shall maintain the following records for transmission line for the periods specified:

   (a) The date, location, and description of each repair made to pipe (including pipe-to-pipe connections) must be retained for as long as the pipe remains in service. …

   (b) The date, location, and description of each repair made to parts of the pipeline system other than pipe must be retained for at least 5 years. However, repairs generated by patrols, surveys, inspections, or tests required by subparts L and M of this part must be retained in accordance with paragraph (c) of this section.

   (c) A record of each patrol, survey, inspection, and test required by subparts L and M of this part must be retained for at least 5 years or until the next patrol, survey, inspection, or test is completed, whichever is longer.

Transco failed to maintain a record of each repair made to parts of the pipeline system other than pipe for at least 5 years. Specifically, Transco failed to maintain a record of the date and description of the repair made to a leak discovered on the V-89 tap valve during their 2013 annual leak survey.

During the inspection, the PHMSA inspector reviewed annual leak survey records from 2013-2016 in the Virginia – North district and established the following:

1. On April 23, 2013, a Class 3, aerial leak survey was performed by New Era Technology, Inc. with on-board leak detection equipment.
2. Transco received a report from New Era for this survey on 5/1/2013. The report and corresponding WGP-0045 "WilSOP Land Patrol Report Form" (Form) indicated that a leak was discovered in the V-89 tap valve pit on a blind flange, which was subsequently investigated on 5/2/13. The comments on the Form stated in part "Repair will require a pipeline outage. This has been added to our remedial list".

The PHMSA inspector asked if the leak had been repaired. Transco's Virginia-North personnel stated that the leak in question was repaired. Transco did not have any record of the repair.

Thus, Transco failed to maintain a record of each repair made to parts of the pipeline system other than pipe for at least 5 years.

8. **§192.745 Valve maintenance: Transmission lines.**

   (a) Each transmission line valve that might be required during any emergency must be inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year.

Transco failed to partially operate emergency valves at intervals not exceeding 15 months, but at least once each calendar year.

Transco documents critical valve inspections and operations on form WGP-0131 titled "Valve Inspection and Operator Maintenance Report" or on Form F07-812 titled "Valve Inspection Report". Both forms contain a section for valve operation and have three columns within that section:

1. Automatic(A) or Manual(M)
2. Partial(P) or Full(F)
3. Satisfactory (S) or Unsatisfactory(U)

During the inspection, the PHMSA inspector reviewed Transco's critical valve inspection and operation records for 2013, 2014, and 2015. The records indicated 14 instances where valves listed below were not operated at intervals not exceeding 15 months, but at least once each calendar year:

1. West Page 2 and West Page 3 – District 200 Critical Valves - IU 2831-Transco's Pennsylvania-Southeast District

The emergency valve inspection and operation records for valves 195-A20 and P-361 did not show full or partial operation in Calendar Year 2014. The records for 2014, dated 10/22/14 for valve 195-A20 and 10/15/14 for valve P-361, have "n/a" entered in the "Partial or Full" operation column and in the "Satisfactory or Unsatisfactory" column. Other valves shown on the forms have a "P" or "F" entered indicating either partial or full operation of the valve and have "S" entered for satisfactory operation. Transco could not produce records indicating operation of these valves in calendar year 2014.

2. Station 515-Bear Creek - IU 2841-Penn Leidy-East District

The emergency valve inspection and operation records for valves PL 30 and PL 125 did not show full or partial operation in the Calendar Years of 2013 or 2014. The records dated 6/18/13 and 8/06/14 for PL30 and 6/18/13 and 8/07/14 for PL125 have "LOTO" in the Partial or Full operation column. LOTO is an abbreviation for Lock Out/Tag Out. Other valves shown on the forms have a "P" or "F" entered indicating either partial or full operation of the valve. These valves were not operated in calendar year 2013 or 2014. In 2015, PL 30 and PL 125 were both partially operated on July 6, 2015, according to the emergency valve inspection and operation records. Transco stated, through discussion during the PHMSA inspection, that the status of the valve had not changed from 2013/2014 to 2015. Therefore, since the valve was partially operated in 2015, the valve could have been partially operated during the 2013 and 2014 valve maintenance inspections.

3. Station 517-Benton - IU 2841-Transco's Penn Leidy-East District

The emergency valve inspection and operation records for valves 517 LDO and 517 S1 did not show full or partial operation in Calendar Year 2015. The records dated 9/17/15 for 517LDO and 9/16/15 for 517 S1 have "n/a" entered in the "Partial or Full" operation column. Transco could not produce records indicating operation of these valves in calendar year 2015. A Management of Change Document "MOC"-WGP-220A Line East, was provided for review during the inspection. This MOC document addressed the change of valve 517S1 to a normally closed position, however this MOC document did not remove this valve from the emergency valve status and this valve remained on the emergency valve inspection and operation form.

4. Station 205 and Milltown regulator - IU 15121 and IU 181- Transco's New Jersey-South District

The emergency valve inspection and operation records for valves J626 and J347 did not show full or partial operation in 2014 or 2015. In 2016, these two valves were commissioned to remote valves with records of operation in 2016, but the operation of the valves was not recorded on the 2016 Valve Inspection Report. The 5/14/14 and 5/21/15 entries have "N/A" entered in the "Partial or Full" operation column. Other valves shown on the forms have a "P" or "F" entered indicating either partial or full operation of the valve. The remark section for valves J626 and J347 on the 2015 and 2016 emergency inspection and operation records state "Do not operate due to cutting flow to customer". Through discussion with Transco, and review of Diagrammatic Valve Chart DV-NJ-002, PHMSA Inspectors and Transco Staff agreed that these valves can be, and should be, partially operated without affecting flow to customers.

Emergency valve inspection and operation records for valves B1 200A40 and B2 200A40 did not show full or partial operation of these valves in 2014. These valves were entered under a single entry on the 2014 emergency valve inspection and operation records. The 5/14/14 entry has "n/a" entered in the "Partial or Full" operation column and in the "Satisfactory or Unsatisfactory" column. Other valves shown on the forms have a "P" or "F" entered indicating either partial or full operation of the valve and have "S" entered for satisfactory operation.

Thus, Transco failed to partially operate emergency valves at intervals not exceeding 15 months, but at least once each calendar year.

9. §192.933 What actions must be taken to address integrity issues?

(b) Discovery of condition. Discovery of a condition occurs when an operator has adequate information about a condition to determine that the condition presents a potential threat to the integrity of the pipeline. A condition that presents a potential threat includes, but is not limited to, those conditions that require remediation or monitoring listed under paragraphs (d)(1) through (d)(3) of this section. An operator must promptly, but no later than 180 days after conducting an integrity assessment, obtain sufficient information about a condition to make that determination, unless the operator demonstrates that the 180-day period is impracticable.

Transco failed to obtain sufficient information about a condition within 180-days of completing an integrity assessment in order to make a determination of whether the condition presented a potential threat to the integrity of the pipeline and failed to demonstrate that the 180-day period was impracticable. Specifically, Transco's date of discovery for 2 assessments exceeded the 180-day limit, and Transco failed to demonstrate why compliance with the 180-day period for discovery of a condition was impracticable.

During the headquarters inspection, the PHMSA inspector reviewed Integrity Management assessment records from 2013 to 2016. The records included dig lists resulting from various ILI assessments. Two records contained a date of discovery for scheduled conditions that were more than 180 days after the date of the assessment. These assessments were:

<u>Mainline A Delaware River to Station 200</u>

1. ILI Runs Completed: 3/12/13 (Geometry) and 3/14/2013 (MFL)
2. Final ILI Reports Received: 5/3/13 (Both)

3. Final Dig List Issued (Date of Discovery): 11/13/2013
   a. 248 days since Geometry run completed
   b. 246 days since MFL run completed

Mainline B (MLCW_B Station 505 to MLV 195B20)

1. ILI Runs Completed: 3/20/14 (Geometry) and 6/9/14 (MFL)
2. Final ILI Report Received: 8/14/14 (Both)
3. Final Dig List Issued (Date of Discovery): 8/27/2015
   a. 525 days since Geometry run completed
   b. 444 days since MFL run completed

The PHMSA inspector asked Transco why the documented Date of Discovery for these assessments exceeded 180 days from the date of the assessment completion. Transco referenced procedure 70.17.01, *Pigging – Inline Inspection*, Rev. 16, dated 12/31/2012, Section 8.1.4, which states in part "…For reassessments, additional time may be required to complete run comparisons and to verify that indications identified on the most recent ILI inspection were not already addressed as a result of previous ILI projects. Issuance of the dig list constitutes discovery." No further documentation pertaining to these assessments was provided.

Thus, Transco could not provide documented justification for why the 180-day period was impracticable.

10. §192.947 What records must an operator keep?

An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At minimum, an operator must maintain the following records for review during an inspection.

…

(d) Documents to support any decision, analysis and process developed and used to implement and evaluate each element of the baseline assessment plan and integrity management program. Documents include those developed and used in support of any identification, calculation, amendment, modification, justification, deviation and determination made, and any action taken to implement and evaluate any of the program elements;

Transco failed to maintain records to support their decisions, analysis and processes regarding the implementation of their Preventive and Mitigative measure element of their integrity management program.

Transco's *400 Integrity Management Plan*, dated 11/16/11, Section 9.3, states in part:

> "1. All new (and existing) HCAs are reviewed annually by IMP SMEs and Operations personnel to ensure appropriate P&M Measures are assigned and implemented, and to ensure the P&M Measures are effective. The annual review will also be used to assign new P&M measures if required. See Procedure 10.25.01 Risk Analysis and Threat Assessment. All new P&Ms are communicated to the appropriate parties via the MOCR process. Procedure 10.06.01 BAP Review
>
> 2. Additional P&M Measures are also reviewed annually for High Risk segments. High

Risk segments are identified and reviewed to determine if any additional P&Ms should be taken to mitigate threats per Procedure 10.06.01 BAP Review Section 10.2. All P&Ms are documented in the BAP and communicated to the appropriate parties via the MOCR process.

3. Annually the BAP is updated with current assessment results. IMP Team Leads ensure any new P&Ms are assigned as a result of the assessment findings. Procedure 10.06.01 BAP Review Section 1.1. All P&Ms are documented in the BAP and communicated to the appropriate parties via the MOCR process."

Section 9.4 of the plan states in part:

"WGP performs increased patrolling frequencies as follows (weather permitting):

- Transco and Cardinal conducts an aerial patrol of all Class locations once a week."

During the field inspections, inspectors from PHMSA and NY-DPS reviewed the current contents and exported reports from Transco's Integrity Dashboard database. Transco identified this database as the current system of record for Preventive and Mitigative Measures (PMMs) employed at HCAs within their system. The PHMSA inspector noted inconsistencies and inaccuracies in the data contained in this database. These issues included:

1. PMMs that were employed throughout Transco's system were documented for some HCAs and not for others. Specific examples include the PMMs "Remote Rectifier Monitoring" for the External Corrosion threat and "Increased Patrol Frequency" for the Third Party Damage threat, which were listed for a majority of the HCAs, but absent from others. The PMM report for the Virginia – North district did not identify Increased Patrol Frequency as a PMM for any of the sixteen HCAs in their district. By comparison, the thirteen HCAs in the Compressor Station (CS) 520 area, Leidy East District, all identify "Increased Aerial Patrols – Weekly" as a PMM for the Third Party Damage threat and one HCA did not have "Remote Rectifier Monitoring" identified. The PMM report for CS 505 area, NJ – South district, contains four HCAs where "Remote Rectifier Monitoring" is not identified under the External Corrosion threat, and forty-one HCAs where "Increased Patrol Frequency" is not identified under the Third Party Damage threat. Patrols are performed daily or every other day within the NY operating areas of the NJ-North District, but the information reviewed in the Integrity Dashboard at the time of inspection did not reflect this.
2. PMMs were no longer being implemented by Transco in specific HCAs, but were still being listed in the Integrity Dashboard. For example, the PMM "Pipeline Cleaning" was listed for thirteen HCAs in the CS 505 operating area, NJ – South district, to address the threat of Internal Corrosion. No additional pipeline cleaning activities were identified as being performed in these HCAs beyond the typical cleaning pigs that are run with most in-line inspections performed throughout Transco's system. No documentation could be provided showing when this PMM started, was implemented, or was considered completed.
3. A comparison between what was recorded in the Integrity Dashboard and a master list of the currently available PMMs identified by Transco demonstrated PMMs could not be matched to an available PMM on Transco's current master list. For example, "Additional Valve Testing" is identified for 27 HCAs in the CS 505 operating area, NJ – South district,

and is listed as addressing the threat of Incorrect Operations. The master list does not contain a PMM called "Additional Valve Testing" under the Incorrect Operations threat. No additional valve testing was identified as being performed by personnel at this CS that meets the description of this PMM.

4. The Integrity Dashboard itself does not capture sufficient details to demonstrate when PMMs were identified, what their schedule is for implementation, and to document that implementation has been completed or ceased.
5. The PHMSA inspector also requested Management of Change Records (MOCRs) related to PMMs, as described in Section 9.3 of the *400 Integrity Management Plan* quoted above. The PHMSA inspector reviewed the 2013 to 2015 records provided, and found no mention of any changes to PMM measures.

Thus, Transco failed to maintain records to support their decisions, analysis and processes regarding the implementation of their Preventive and Mitigative measure element of their integrity management program.

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed $209,002 per violation per day the violation persists, up to a maximum of $2,090,022 for a related series of violations. 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. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of $395,400 as follows:

Item number	PENALTY
1	$37,700
2	$50,700
3	$53,100
4	$35,700
5	$47,500
6	$27,600
7	$27,300
8	$64,400
9	$51,400

Proposed Compliance Order

With respect to items 2, 3, 9 and 10 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Transco. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

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. All material you submit in response to this enforcement action may be 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, or request a hearing under 49 CFR § 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 a Final Order. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. This period may be extended by written request for good cause.

Please submit all correspondence in this matter to Robert Burrough, Director, PHMSA Eastern Region, 820 Bear Tavern Road, Suite 103, West Trenton, New Jersey 08628. Please refer to **CPF 1-2018-1002** 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 a CD 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

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Transcontinental Gas Pipe Line Company (Transco) a Compliance Order incorporating the following remedial requirements to ensure the compliance of Transco with the pipeline safety regulations:

1. In regard to Item Number 2 of the Notice pertaining to Transco's failure to keep records of § 192.609 Change in class location: Required study (Required Study), Transco shall conduct a study for all pipeline segments in Transco's Charlottesville and Princeton Districts (PHMSA's "Williams-North" Inspection System) to identify pipeline segments where the hoop stress corresponding to the established MAOP is not commensurate with the present class location. Once these pipeline segments are identified, Transco shall complete the following actions:

    a. Within 90 days of the date of issuance of this Final Order, Transco shall identify pipeline segments where the hoop stress corresponding to the established MAOP is not commensurate with the present class location and perform a study, if such a study does not exist or is insufficient to meet the requirements of § 192.609 Change in class location: Required study and Transco's applicable procedures, such as 70.20.01.03.

    b. Within 180 days of the date of issuance of this Final Order, Transco shall have addressed and documented any issues identified during the required study analysis and made necessary changes to the pipeline and/or pipeline operating pressure.

    c. Within 120 days of the date of issuance of this Final Order, Transco shall prepare a summary report of the analysis and findings required above and include:

        i. A detailed description of the process Transco used to review pipeline segment data and perform the Required Study, including the parameters reviewed during the Required Study to comply with 49 CFR Part 192 and Transco's procedures

        ii. The total number of pipeline segments analyzed, the total number of pipeline segments identified where the hoop stress corresponding to the established MAOP is not commensurate with the present class location, and the number of those identified segments where no, or an insufficient, record of the Required Study exists.

        iii. A description of the findings of the Required Studies, and analysis per Transco procedures, performed as a result of this Order.

        iv. A description of actions taken to address issues identified during the Required Study analysis, along with continuing or planned additional actions.

    d. Within 120 days of the date of issuance of this Final Order, Transco shall prepare a report containing, but not limited to, the following data:

i. Identify pipeline sections where the hoop stress is not commensurate with the present class location. Include the state, line identification, segment install date, pipe grade and mile post.

ii. State if the pressure test on this section meets the requirements of § 192.611 (a)(1) Change in Class Location. Provide the pressure at which the section was tested and duration of the test.

iii. Provide the hoop stress calculated and MAOP for the pipeline section.

iv. Provide the class location at time of construction (if known), current class location and the class location for which the hoop stress and MAOP are commensurate.

v. Indicate which pipeline section had an adequate record of the § 192.609 Required Study and which did not.

vi. Provide the date the Required Study was performed.

vii. For those pipeline segments where a Required Study did not exist, or was found to be insufficient, indicate the evaluation results, with a satisfactory or unsatisfactory and comments where explanation is needed, for each of the following:

1. Separately for sections (a)-(f) of § 192.609
2. Section 192.611
3. Transco's applicable procedures

viii. Provide the findings of the analysis for each segment and actions taken as a result of the findings.

2. Transco must complete the requirements as outlined in #1 a-d above. All documentation demonstrating compliance with #1 a-d above shall be submitted, within 180 days of the date of issuance of this Order, to Robert Burrough, Director, Eastern Region, Pipeline and Hazardous Materials Safety Administration, Suite 103, Bear Tavern Road, West Trenton, NJ for review.

3. In regard to Item Number 3 of the Notice pertaining to Transco's failure to prepare atmospheric corrosion inspection plans required by their procedure 20.13.01, *Atmospheric and Offshore Splash Zone Corrosion Inspections*, Rev. 1, dated 12/31/2012, Transco must evaluate the entire Williams North inspection system for areas of "special consideration" as defined in the procedure, and develop site specific atmospheric corrosion evaluation plans for all identified locations.

4. In regard to Item Number 9 of the Notice pertaining to Transco's failure to discover conditions within 180 days of conducting integrity assessments, Transco must review and update its procedures regarding Discovery of Condition, including 70.17.01, *Pigging – Inline Inspection*. The updates to the procedures should include, but are not limited to:

a. Defining "impracticable" with regard to §192.933(b) and the 180-day period for discovery of condition;

b. Requiring discovery of condition to occur within 180 days on all assessments, unless demonstrated to be impracticable for an integrity assessment via specified documentation;

c. Documentation requirements for demonstrating impracticability of the 180-day period for an assessment.

5. In regard to Item Number 10 of the Notice pertaining to Transco's failure to maintain records supporting their Preventive and Mitigative (P&M) Measures element of their Integrity Management Program, Transco shall complete the following actions at a minimum:

a. Within 60 days of the issuance of this Final Order, Transco shall review and update its current procedures regarding their P&M Measures process. These updates shall include, but are not limited to:

i. Defining the method for documenting P&Ms, including frequency for updating the system of record, and what specific information will be captured. This may include information such as date of initiation, completion, termination or other changes to the P&M.

ii. Defining the roles and responsibilities regarding making these updates to their system of record.

b. Within 90 days of the issuance of this Final Order, Transco must review and update the current data in their Integrity Dashboard or other updated system of record for the current P&Ms in place in their high consequence areas, to comply with the updated procedures in 5a. above.

6. It is requested (not mandated) that Transco maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Robert Burrough, Director, Eastern Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.