



Columbia Gas Transmission LLC

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July 17, 2015

Mr. Allan C. Beshore
Director, Central Region
United States Department of Transportation
Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety
Central Region
901 Locust Street, Suite 462
Kansas City, MO 64106-2641

RE: Response to Notice of Probable Violation and Compliance Order CPF 3-2015-1007

Dear Mr. Beshore:

This letter is provided on behalf of Columbia Gas Transmission LLC (Columbia Gas) in response to Notice of Probable Violation, CPF 3-2015-1007 ("NOPV"), dated May 28, 2015 and received by Columbia Gas on June 8, 2015. The NOPV was issued following inspections conducted by the Ohio Public Utilities Commission between January and August of 2014 of Columbia Gas facilities in Ohio. The NOPV alleges violations of certain provisions of the natural gas pipeline safety regulations and proposes a compliance order.

This communication addresses the NOPV and provisions of the Compliance Order. The language from the NOPV is provided in bold below, followed by our response.

1. **§191.17 Transmission systems, gathering systems, and liquefied natural gas facilities. Annual report.**
 - (a) **Transmission or Gathering. Each operator of a transmission or a gathering pipeline system must submit an annual report for that system on DOT Form PHMSA 7100.2.1. This report must be submitted each year, not later than March 15, for the preceding calendar year, except that for the 2010 reporting year the report must be submitted by June 15, 2011.**

Columbia Gas Transmission (CGT) did not report on the 2013 annual report two newly constructed pipelines that were in operation in 2013.

Lines R443 and A120 are two new plastic pipelines that were completed and operational in 2013. Review of the 2013 annual report found that neither of the two pipelines was reported.

Columbia Gas Response

R443 and A120 were existing pipelines in 2013. The project on line R443 involved the replacement of approximately 3.5 miles of bare pipe with 3 in diameter plastic (project 15372). The A120 project involved the replacement of 15 miles of 10 inch bare steel with 4 inch diameter plastic pipe (project 14633). Both projects involved the replacement of existing pipe and were completed in 2013 as part of Columbia Gas's Modernization Program. Columbia Gas submitted an annual report for its system before the March 15, 2014 deadline for reporting covering 2013. As the length of the R443 and A120 pipelines did not substantially change as the result of the replacement projects, the report filed in 2014 included the mileage for both Lines R443 and A120. Columbia Gas files the annual report based upon information included in its Geographic Information System database (GIS). The database is updated with as-built information from construction projects following the requirement of the company's Operations and Maintenance (O&M) Manual. Time is necessary to finalize as-built documentation following construction so that accurate information can be posted to the Company's GIS database. Columbia followed its O&M Plan to update the GIS for Lines R443 and A120. As the information regarding the replacements on Lines R443 and A120 was posted to the GIS after the March 15, 2014 deadline for filing the annual report for 2013, the report did not reflect the replacement of the steel lines with plastic. In 2014, Columbia Gas implemented changes in its processes that will help ensure more timely entry of construction information into its GIS following the completion of construction projects.

2. §192.465 External corrosion control: Monitoring

- (d) Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring:

In the Cambridge and Meigs operating area, CGT did not promptly remediate two deficient cathodic protection readings.

Review of the cathodic protection records identified two low potential readings on Line V148 for 2012 and 2013. The readings in the records are as follows:

<u>Test Point</u>	<u>Date</u>	<u>Reading</u>
Asset 874156	6/26/2012	-0.740v
	3/26/2013	-0.810v
Asset 874147	6/26/2012	-0.800v
	3/26/2013	-0.830v

No other records were produced to show that any remedial actions were taken from 3/26/2013 until the end of the 2013 calendar year.

Columbia Gas Response

Additional cathodic protection was installed in September 2012 following the June 26, 2012 cathodic protection readings on Asset 874156 and Asset 874147. According to the Corrosion Mechanic at the time, test station readings at Assets 874156 and 874147 met an -0.85 Volt cathodic protection criteria in compliance with Part 192, Appendix D requirements shortly after installation of the

additional cathodic protection. This can be evidenced by the improvement in the cathodic protection readings taken on 3/26/2013 over those collected in 2012 (the readings on Asset 874156 changed from -0.74 V to -0.81 V and the readings at Asset 874147 changed from -0.800 V to -0.830 V from June 26, 2012 to March 26, 2013). Attachment A contains an affidavit from the former (and now retired) Columbia Gas Transmission Corrosion Mechanic stating that additional cathodic protection was installed at these locations in September of 2012 and following installation, cathodic protection readings were in compliance with 49 CFR Part 192, Appendix D criteria. Following the readings collected in March of 2013, Columbia again installed additional cathodic protection to bring the pipeline back into compliance with CP criteria. The readings collected following installation of the additional cathodic protection demonstrate compliance with 49 CFR Part 192, Appendix D requirements. As demonstrated above, Columbia Gas had taken measures to mitigate areas that did not meet cathodic protection criteria in a timely manner in accordance with its O&M procedures following both the March 2012 and March 2013 test station inspections. Columbia Gas, therefore, respectfully requests the elimination of this finding and the associated fine.

3. §192.479 Atmospheric corrosion control – General

- (a) Each operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.

CGT did not clean and coat the soil to air interface at multiple exposures on Lines V138, H107, and H87. During the records review, there were multiple exposures that were scheduled for remediation on Line H107 and H87, but did not occur by the due date. Subsequent field visits to the exposures on both lines verified that no action had been taken at the soil to air interface to clean and coat the exposed pipelines.

The following exposures with the soil/air interface issues noted during the field review are as follows:

- 1) Asset 1369681 for Line V138 (Identified by CGT on March 13, 2006)
- 2) Asset 1370688 for Line V138 (Identified by CGT on March 27, 2007)

During the records review, the following exposures for line H107 did not receive any remedial actions to address the soil to air interface. All of the exposures except Assets 1566279 and 1566280 should have been addressed by the time of the field inspection. Assets 1566279 and 1566280 had a scheduled completion date of July 1, 2014, which was less than a month from the time of the field review. The subsequent field review of the field exposures on Line H107 verified that no action had been taken:

- 1) Asset 906165 (Identified by CGT on April 27, 2012)*
- 2) Asset 906166 (Unknown)*
- 3) Asset 906167 (Identified by CGT on April 27, 2012)*
- 4) Asset 906168 (Identified by CGT on April 27, 2012)*
- 5) Asset 906169 (Identified by CGT on April 27, 2012)*
- 6) Asset 906170 (Identified by CGT on April 27, 2012)*
- 7) Asset 906171 (Identified by CGT on April 27, 2012)*

- 8) Asset 906172 (Identified by CGT on April 27, 2012)*
- 9) Asset 906173 (Identified by CGT on April 27, 2012)*
- 10) Asset 1548046 (Identified by CGT on May 1, 2012)*
- 11) Asset 1548047 (Identified by CGT on May 1, 2012)*
- 12) Asset 1566279 (Identified by CGT on July 2, 2013)*
- 13) Asset 1566280 (Identified by CGT on July 2, 2013)*
- 14) Asset 1566281 (Identified by CGT on July 2, 2013)*

**Verified in the field that no remedial action was taken*

The records review found that the following exposures on Line H87 had not received any remedial actions at the soil to air interface:

- 1) Asset 906159 (Identified by CGT on April 10, 2012)
- 2) Asset 906160 (Identified by CGT on April 10, 2012)
- 3) Asset 1547598 (Identified by CGT on April 11, 2012)
- 4) Asset 1559935 (Identified by CGT on January 30, 2013)
- 5) Asset 1559937 (Identified by CGT on January 30, 2013)
- 6) Asset 1559938 (Identified by CGT on January 30, 2013)

After the inspection CGT personnel indicated that a project scope to replace 8,612 feet of Line H107 and 2,600 feet of Line H87 was developed. These replacements would address these exposures. However, CGT could not indicate when those projects would occur. This probable violation is a repeat violation of CPF 3-2010-1005, Item #2.

Columbia Gas Response

Lines V-138, H107 and H87 are relatively low pressure pipelines that operate at a maximum allowable operating pressures (MAOP) of 50 psig, 65 psig and 225 psig respectively. Projects to address the exposures on these pipelines are planned for completion during 2016. The projects involve the replacement of the pipelines or portions of the pipelines that will address the exposures. Some preliminary engineering has already been completed for some of the projects in advance of the planned 2016 construction. Columbia Gas will provide a plan to address the exposures on Line V-138 and a schedule for completion of the planned projects on H107 and H87 within 30 days of receipt of the final compliance order.

4. §192.619 Maximum allowable operating pressure – Steel or plastic pipelines

(a) No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:

- (1) The design pressure of the weakest element in the segment determined in accordance with subpart C and D of this part. However, for steel pipe in pipelines being converted under §192.14 or uprated under subpart K of this part, if any variable necessary to determine the design pressure under the design formula (§192.105) is unknown, one of the following pressures is to be used as a design pressure

CGT failed to have their maximum allowable operating pressure (MAOP) established according to the design pressure of the weakest element in their segment.

During the records review of the regulatory inspections at Nicodemus regulator station, it was noted that the Fisher 627M regulators had a ¼" orifice in them. Review of the manufacturer specifications found that the ¼" orifice had a maximum inlet pressure of 750 psig. The MAOP of the pipeline that feeds this station is 800 psig. As a result, CGT personnel changed out the orifice to maintain the 800 psig MAOP and conducted a review of other stations to ensure that there were no other inappropriately sized orifices.

Columbia Gas Response

As noted above, once the problem with the ¼ inch orifice was recognized, Columbia Gas changed out the orifice and completed a review at other stations to determine if there were no other inappropriately sized orifices.

5. §192.707 Line markers for mains and transmission lines.

(c) Pipelines above ground. Line markers must be placed and maintained along each section of a main and transmission line that is located aboveground in an area accessible to the public.

CGT did not have line markers at two locations where their pipeline was aboveground and accessible to the public.

During the field review of Line V-138, two aboveground exposures were observed. The exposures are not located in a restricted area and are accessible by the public. Neither of the exposures had any line markers near them. The exposures noted are as follows:

For line V-138:

- 1) Asset 1369681
- 2) Asset 1370688

Columbia Gas Response

Columbia Gas confirmed that line markers were installed at both exposure locations listed above following the 2014 inspection. Photographs confirming installation of line markers at these locations are included in Attachment B.

Columbia Gas will identify all exposures in the Meigs and Cambridge operating areas and confirm installation of line markers at these location within 180 days of from receipt of the final compliance order. Where line markers may be found to be missing, new line markers will be installed.

6. 192.905 How does an operator identify a high consequence area?

(b)(1) Identified Sites. An operator must identify an identified site, for purposes of this subpart, from information the operator has obtained from routine operation and maintenance activities and from public officials with safety or emergency response or

planning responsibilities who indicate to the operator that they know of locations that meet the identified site criteria. These public officials could include officials on local emergency planning commission or relevant Native American tribal officials.

CGT did not properly identify two high consequence areas (HCA) on Line B108 from Marten Park in Lancaster, Ohio to State Route 188 regulator station.

During the field evaluation of Line B108 in the Treat operating area, two identified sites were noted on the line. The two sites noted are the Anchor Hocking Glass Company and the Martins Park Ball Field. Line B108 is an 8" diameter line with an MAOP of 125 psig. The potential impact radius (PIR) calculates to approximately 120 feet. Both these sites fall within the PIR and were present before 2004.

Originally, CGT added the Anchor Hocking building as an HCA but it was eliminated in 2006 because they determined that there were not twenty people within the PIR where the radius intersected the plant. However, this facility should have stayed on the HCA list because if any portion of a building containing twenty people for the time periods specified in the rule is within the PIR, that building should be treated as an identified site. CGT did add this site to the HCA list in 2013.

CGT could not provide an explanation of why the Martins Park Ball Field was not put on the HCA list prior to 2013. In 2013, CGT added this site to the HCA list. However, it was subsequently removed in 2015 because CGT's research on February 26, 2015, found that the park only met the criteria for the number of people for thirty-six days per year. However, when our inspector talked to the manager of Martins Park Ball Field on March 3, 2015, he indicated that they had four ball diamonds with about thirty kids on each diamond, not including the crowd. He also indicated that this occurred more than fifty days annually, since games are played on the fields Monday through Saturday from May to August. It appears that this site should stay on the HCA list.

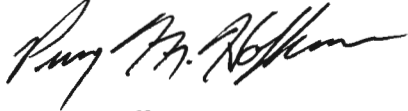
Columbia Gas Response

Columbia Gas follows a procedure to update its High Consequence Areas (HCA) along its pipeline system at least once per year. Each year Columbia Gas continues to make improvements to our procedures and our Geographic Information System (GIS) as it relates to the identification of potential HCAs along our pipelines. As part of our continual improvements, the foot print of larger buildings are being outlined to ensure whenever the PIR intersects the building outline it is appropriately identified as an HCA. As a result of this improvement in 2013, the Anchor Hocking site was identified as high consequence area.

The Martens Park was not initially identified by public officials with safety or emergency response, or planning responsibilities, or normal operations and maintenance activities, as an identified site. In February of 2015, Columbia Gas contacted and spoke to an official from Martens Park who indicated that the fields were used 10 to 12 weeks per year, primarily for weekend softball tournaments. From the information provided, the park did not meet the criteria of being occupied by 20 or more people for more than 50 days per year. As such, the Martens Park was not identified as an HCA.

If you have any questions or would like additional information, please do not hesitate to contact me.

Sincerely,

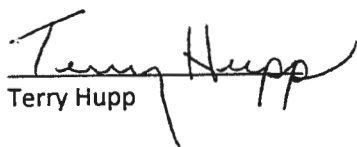
A handwritten signature in black ink, appearing to read "Perry M. Hoffman". The signature is fluid and cursive, with the first name "Perry" being more prominent.

Perry M. Hoffman
Manager – System Integrity
Columbia Pipeline Group

Attachment A

**Columbia Pipeline Group
Affidavit from Former (Retired) Columbia Gas Transmission
Corrosion Technician Regarding Installation of Cathodic
Protection and Follow-up Cathodic Protection Readings at
Assets 874156 and 874147**

For Assets 874156 and 874147 additional cathodic protection was installed with in September 2012 following the June 26, 2012 cathodic protection readings on Asset 874156 and Asset 874147. This can be evidenced by the improvement in the cathodic protection readings taken on 3/26/2013 over those collected in 2012 (the readings on Asset 874156 changed from -0.74 V to -0.81 V and the readings at Asset 874147 changed from -0.800 V to -0.830 V from June 26, 2012 to March 26, 2013). The corrosion mechanic in September 2012, spoke with his support about a replacement in this area. These two assets are now included in Protool (15743) project for replacement.


Terry Hupp

Attachment B

**Columbia Pipeline Group
Line V-138 Exposure Locations
Photographs Showing Line Markers**



Line V-138 Exposure - Asset 1369681- Photo Showing Line Markers



Line V-138 Exposure - Asset 1370688 - Photo Showing Line Markers