

**U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
EASTERN REGION
TRENTON, NEW JERSEY 08628**

_____)	
In the Matter of)	
)	
Columbia Gas Transmission, LLC)	CPF No. 1-2011-1013S
)	
Respondent.)	
_____)	

NOTICE OF PROPOSED SAFETY ORDER

Background and Purpose

Pursuant to Chapter 601 of title 49, United States Code, the Pipeline and Hazardous Materials Safety Administration (PHMSA) has initiated an investigation of the safe operation of a portion of the Millennium Pipeline in the State of New York, including the investigation of a natural gas leak that occurred on January 11, 2011 at MP 47.5 (42.15309, -7613328). The Millennium Pipeline System is owned by the Millennium Pipeline Company, LLC and is operated by Columbia Gas Transmission, LLC (CGT), a subsidiary of NiSource, Inc. The Millennium Pipeline is a 182-mile system extending from Independence in Steuben County, New York to Buena Vista in Rockland County, New York.

As a result of this investigation, it appears that conditions exist on the section of the Millennium Pipeline running from Corning to Ramapo, New York (the Affected Sections) that pose a pipeline integrity risk to public safety, property or the environment. Pursuant to 49 U.S.C. § 60117(l), PHMSA issues this Notice of Proposed Safety Order, notifying you of the preliminary findings of the investigation, and proposing that you take measures to ensure that the public, property, and the environment are protected from the potential risk.

Preliminary Findings

- The Millennium Pipeline extends from Independence in Steuben County, New York to Buena Vista in Rockland County, New York. The pipeline consists of 10 and 12 inch diameter pipe from Independence near the Greenwood Compressor Station to the Corning Compressor Station. The pipeline consists of 30 inch diameter pipe from the

Corning Compressor Station to Huguenot and 24 inch diameter pipe from Huguenot to Westtown. Finally, the pipeline consists of 30 inch diameter pipe from Westtown to Ramapo.

- The 30 inch diameter pipe was installed in 2007 and 2008 and is approximately 180 miles in length, constructed of X70 pipe with wall thicknesses of : .405, .429, .515 inches. The 30” and 24” sections of the pipeline were placed into service in December 2008.
- The Affected Sections include the 30” and 24” diameter pipeline sections which transport natural gas from Corning to Ramapo, New York.
- On January 11, 2011, a natural gas leak was discovered when operator personnel observed bubbles in a creek in a remote area of Tioga County during routine inspection activities. The leak was discovered approximately 1100 feet from Schneider Road (MP 47.5) in a class 1 location.
- The leak resulted in the release of 1,328 MCF of natural gas, which did not ignite. There were no injuries, fatalities, or property damage resulting from the leak.
- The established maximum allowable operating pressure (MAOP) of the 30” and 24” sections of the pipeline is 1,200 pounds per square inch gauge ("psig"). A hydrostatic test was performed on November 11, 2008, following construction of the pipeline to establish the 1,200 MAOP. The actual operating pressure of the line at the time of the discovery of the leak was approximately 1,070 psig.
- A geometry in-line inspection tool was implemented on November 17, 2008, after the construction of the pipeline system. Inspection data was analyzed and identified potential remedial locations were excavated and evaluated. There were no identified geometry anomaly indications noted at the eventual leak location.
- The New York State Department of Public Service (NY DPS) conducted an investigation to determine the cause of the leak. The investigation included an analysis of weld and nondestructive testing (NDT) records for the sections of the Millennium Pipeline that run from the Corning Compressor Station to Hancock, NY.
- NY DPS determined that the cause of the leak at MP 47.5 was due to a “pinhole” in a circumferential girth weld joining two pieces of 30” diameter pipe. The weld was characterized as a “double joint” weld, which refers to a mechanized weld that was made to join two lengths of pipe in a staging yard, prior to shipping to the final installation site. Records indicate that the double joint pipe section containing the anomaly did not pass a visual inspection and was set aside at the double joint rack where the welding activities were being performed. It appears that during the course of the construction project for the line, the subject pipe section was inadvertently picked up and subsequently installed in the pipeline.

- In addition, as part of their investigation, NY DPS reviewed the radiographic records that were generated during construction of the Millennium Pipeline. Based on this review, they identified two double joint butt welds and one tie-in weld, as outlined in Paragraph 3J below, that were not adequately evaluated. The daily radiographic report for the two double joint welds indicated that the butt welds required re-evaluation (REX100 %); however, no records were provided to show that the re-evaluation was ever performed. Based on the available records, it appears that the two suspect butt welds were installed in the pipeline without any known repairs or further nondestructive testing. In addition to the two suspect butt welds, a tie- in weld with the NDT status identified as “Unknown” was listed on the alignment sheet as being installed in the pipeline. Columbia Gas Transmission personnel were unable to provide records demonstrating that nondestructive testing had been performed on the tie-in weld. These issues and the inconsistencies in NDT documentation raise concerns as to the integrity of other welds throughout the Millennium Pipeline System.
- Upon discovery of the leak, the pressure on the pipeline was reduced. The repair process began on January 12, 2011, with initial work focused on installing an alternate service line to the town of Owego. On January 15, 2011, after completing installation of the alternate service line to Owego, pressure was further reduced in the pipeline section containing the leak and excavation began at the leak site. The leak was located within a butt weld at the 5:30 position on the pipe. The leak measured approximately .125 inches in length. The leak repair was completed on January 16, 2011 and the line returned to normal full pressure.
- NY DPS completed its investigation in May 11, 2011 and forwarded the results to PHMSA.
- Based on these preliminary findings, PHMSA is particularly concerned with the integrity of the welds on the Affected Sections, including but not limited to, the two double joint butt welds and one tie-in weld that were not adequately evaluated. Other welds with similar defects may also develop leaks and potentially lead to a rupture of the pipeline.

Proposed Issuance of Safety Order

Section 60117(l) of Title 49, United States Code, provides for the issuance of a safety order, after reasonable notice and the opportunity for a hearing, requiring corrective measures, which may include physical inspection, testing, repair, or other action, as appropriate. The basis for making the determination that a pipeline facility has a condition or conditions that pose a pipeline integrity risk to public safety, property, or the environment is set forth both in the above-referenced statute and 49 C.F.R. § 190.239, a copy of which is enclosed.

After evaluating the foregoing preliminary findings of fact and considering the age of the pipe involved, the manufacturer, the hazardous nature of the product transported and the pressure required for transporting such product, the characteristics of the geographical areas where the pipeline facility is located, and the likelihood that the conditions could worsen or develop on

other areas of the pipeline and potentially impact its serviceability, it appears that the continued operation of the affected pipeline without corrective measures would pose a pipeline integrity risk to public safety, property, or the environment.

Accordingly, PHMSA issues this Notice of Proposed Safety Order to notify Respondent of the proposed issuance of a safety order and to propose that Respondent take measures specified herein to address the potential risk.

Response to this Notice

In accordance with 49 C.F.R. § 190.239, you have 30 days following receipt of this Notice to submit a written response to the official who issued the Notice. If you do not respond within 30 days, this constitutes a waiver of your right to contest 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 Safety Order.

In your response, you may notify Byron Coy (Regional Director) that you intend to comply with the terms of the Notice as proposed, or you may request that an informal consultation be scheduled. Informal consultation provides you with the opportunity to explain the circumstances associated with the risk condition(s) alleged in the notice and, as appropriate, to present a proposal for a work plan or other remedial measures, without prejudice to your position in any subsequent hearing. If you and PHMSA agree within 30 days of informal consultation on a plan and schedule for you to address each identified risk condition, we may enter into a written consent agreement (Agreement). PHMSA would then issue an administrative consent order incorporating the terms of the agreement.

If a consent agreement is not reached, or if you have elected not to request informal consultation, you may request an administrative hearing in writing within 30 days following receipt of the Notice or within 10 days following the conclusion of an informal consultation that did not result in a consent agreement, as applicable. Following a hearing, if the Associate Administrator finds the facility to have a condition that poses a pipeline integrity risk to the public, property, or the environment in accordance with § 190.239, the Associate Administrator may issue a Safety Order.

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).

In your correspondence on this matter, please refer to CPF **1-2011-1013S** and for each document you submit, please provide a copy in electronic format whenever possible.

Proposed Corrective Measures

Pursuant to 49 U.S.C. § 60117(l) and 49 C.F.R. § 190.239, PHMSA proposes to issue a safety order (Order) to CGT incorporating the following remedial requirements with respect to the affected pipeline:

1. Undertake an assessment of the Affected Sections to ensure the overall integrity of girth welds, using in-line inspection methods and pipe examination as further detailed below. The Affected Sections of the Millennium System, as defined above, include the 30” and 24” diameter pipeline sections which transport natural gas from Corning to Ramapo, New York.
2. Reduce the operating pressure on the Affected Sections so that it does not exceed 80 percent of the highest actual operating pressure during the 60 day period immediately prior to the discovery of the January 11, 2011 leak. This pressure restriction will remain in effect until written approval to increase or restore the pressure is obtained from the Regional Director. The Regional Director may allow the removal or modification of the pressure restriction, upon a written request from Respondent demonstrating that increasing the pressure or returning the line to its original Maximum Allowable Operating Pressure (MAOP) is justified based on a reliable engineering analysis. This analysis must show that the pressure increase is safe considering all known defects (either repaired or remaining), anomalies, outcome of girth weld evaluations and operating parameters in the pipeline.
3. Develop an assessment plan (the Plan) outlining the steps that will be used to analyze the integrity of the circumferential girth welds on the Affected Sections. The terms of the assessment plan must, at a minimum, include the following provisions:
 - (A) The Plan must include provisions for using inline inspection (ILI) tool(s) capable of detecting circumferential weld defects/anomalies, as well as dents and metal loss. Prior to running the tool in the 30” part of the system, the capabilities of the tool must be demonstrated to a third-party weld anomaly expert (acceptable to PHMSA), to ensure the tool is capable of providing accurate data for its intended use to detect weld defects similar to those at the leak location.
 - (B) The Plan must also include a similar assessment on the 24” part of the system. A prior (2008) ILI inspection of the 24” section of the pipeline may be used in lieu of a new ILI inspection, if the data from the prior ILI is capable of detecting weld defects similar to those at the leak location. If the prior ILI is not capable of adequately detecting weld anomalies a new ILI must be performed
 - (C) The Plan must be submitted to the Regional Director for approval.
 - (D) A detailed timeline for implementation of the Plan must be included. All work, including tool runs, data analysis, verification digs, anomaly digs and all required remediation, must be completed by December 30, 2011.

- (E) Upon completion of successful ILI tool runs or the determination that the previous ILI of the 24" is capable as noted in (B) above, preliminary reports outlining any anomaly indications requiring immediate or urgent action, must be submitted to the Regional Director. Submittals must be made promptly as the information becomes available from the vendor. Assessment and remediation of any weld defects, dents and metal loss anomalies identified as a result of the tool runs must be performed in accordance with HCA requirements.
- (F) The Plan must include provisions for performing verification digs at girth weld anomalies and non-girth weld anomalies identified from the analysis of the tool data. Verification digs must be performed to confirm the location and type of the anomalies identified and to verify accuracy of the tool.
- (G) The Plan must define the criteria that will be used to examine, evaluate, and grade the girth weld anomalies.
- (H) Even if no actionable dent or metal loss anomalies are identified, dig locations must be selected based on metal loss indications showing the greatest depth or lowest pressure ratio. Dig locations for girth weld examination must at least include locations where nondestructive test records (NDT) are not available. Field radiographic evaluations of all excavated girth welds must be performed as part of the investigative analysis.
- (I) The Plan must include provisions for notifying the Regional Director and the NY DPS prior to excavations including those indications requiring immediate response.
- (J) The Plan must include provisions for excavating/X-ray "suspect" welds that were identified by the NY DPS during their investigation. These "suspect" welds are outlined below:
- Double Joint Weld 7957
 - Double Joint Weld 8974
 - Tie-in Weld: WLD UNKNOWN 870076 20469 (Station 3383+34) (Point Number 267951)

4. Revise the Plan as necessary to incorporate new information obtained during the evaluations and associated remedial activities. Submit any such plan revisions to the Regional Director for approval. The Regional Director may approve plan elements incrementally. The Plan shall become incorporated into the safety order.

5. Submit monthly reports (due during the 4th week of each month) to the Regional Director that: (1) include available data and results of the testing and evaluations required by the safety order; and (2) describe the progress of the repairs and other remedial actions being undertaken.