

I. General Provisions

1. Respondent acknowledges that, as operator of the Millennium pipeline, Respondent and its pipeline system are subject to the jurisdiction of the Federal pipeline safety laws, 49 U.S.C. 60101 *et seq.*, and the regulations and administrative orders issued thereunder. For purposes of this Consent Agreement, Respondent acknowledges that it received proper notice of PHMSA's actions in this proceeding and that the Notice states claims upon which relief may be granted pursuant to 49 U.S.C. 60101 *et seq.* and the regulations and orders issued thereunder.
2. Respondent neither admits nor denies the allegations in the Notice, but agrees, for purposes of this proceeding, that the integrity risk identified in the Notice exists as described in the Notice. Respondent agrees to complete the actions specified in Section II of this Consent Agreement ("Work to be Performed"), with reference to certain schedules and documents, each of which shall automatically be incorporated into this agreement upon approval.¹ This Consent Agreement does not constitute a finding of violation of any Federal law or regulation and may not be used in any civil proceeding of any kind as evidence or proof of any fact, fault or liability, or as evidence of the violation of any law, rule, regulation or requirement, except in a proceeding to enforce the provisions of this Agreement. Respondent's participation in this Consent Agreement shall not constitute or be construed as an admission of liability for any purpose, except in a proceeding to enforce the provisions of this Agreement.
3. After Respondent returns this signed Consent Agreement, PHMSA's representative will present it to the Associate Administrator for Pipeline Safety recommending that the Associate Administrator adopt the terms of this Agreement by issuing an administrative order (Consent Order) incorporating the terms of this Consent Agreement. The terms of this Consent Agreement constitute an offer of settlement until accepted by the Associate Administrator. Upon the effective date of this Agreement, any request for a hearing submitted by Respondent shall be automatically withdrawn.
4. Respondent consents to the issuance of the Consent Order, and hereby waives any further procedural requirements with respect to its issuance. Respondent waives all rights to contest the adequacy of notice, or the validity of the Consent Order or this Consent Agreement, including all rights to administrative or judicial hearings or appeals.
5. This Consent Agreement shall apply to and be binding upon PHMSA, and upon Respondent, its officers, directors, and employees, and its successors, assigns, or other entities or persons otherwise bound by law. Respondent agrees to provide a copy of this Consent Agreement and any incorporated work plans and schedules to all of Respondent's officers, employees, and agents whose duties might reasonably include compliance with this Agreement.²

¹ This agreement explicitly incorporates by reference: Millennium system map. See Appendix A.

² This agreement binds all parties, including the Millennium Pipeline Company, LLC. and Columbia Gas Transmission, LLC (CGT), a subsidiary of NiSource Gas Transmission & Storage.

6. For all transfers of ownership or operating responsibility of the Millennium pipeline system, Respondent shall provide a copy of this Consent Agreement to the prospective transferee at least 30 days prior to such transfer and simultaneously provide written notice of the prospective transfer to the PHMSA Eastern Region Director (Director).
7. This Consent Agreement constitutes the final, complete and exclusive agreement and understanding between the Parties with respect to the settlement embodied in this Agreement, and the Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Agreement, except that the terms of this Agreement may be construed by reference to exhibits specifically referenced and attached to this Agreement.
8. Nothing in this Consent Agreement affects or relieves Respondent of its responsibility to comply with all applicable requirements of the Federal pipeline safety laws, 49 U.S.C. § 60101 *et seq.*, and the regulations and orders issued thereunder. Nothing in this Consent Agreement alters PHMSA's right of access, entry, inspection, and information gathering or PHMSA's authority to bring enforcement actions against Respondent pursuant to the Federal pipeline safety laws, the regulations and orders issued thereunder, or any other provision of Federal or State law.
9. This Consent Agreement does not waive or modify any Federal, State, or local laws or regulations that are applicable to Respondent's pipeline systems. This Consent Agreement is not a permit, or a modification of any permit, under any Federal, State, or local laws or regulations. Respondent remains responsible for achieving and maintaining compliance with all applicable Federal, State, and local laws, regulations and permits.
10. This Consent Agreement does not create rights in, or grant any cause of action to, any third party not party to this Agreement. The U.S. Department of Transportation is not liable for any injuries or damages to persons or property arising from acts or omissions of Respondent or its officers, employees, or agents carrying out the work required by this Consent Agreement. Respondent agrees to indemnify and hold harmless the U.S. Department of Transportation, its officers, employees, agents, and representatives from any and all causes of action arising from any acts or omissions of Respondent or its contractors in carrying out the work required by this Agreement.

II. Work to be Performed

11. Respondent agrees to perform all actions and adhere to all timelines set forth below in paragraphs 12-22. The plans required below may be revised as necessary to incorporate new information obtained during the evaluations, which may result in additional or modified remedial activities to be performed under the plan. Respondent will submit any such plan revisions to the Director for prior approval, who may approve plan elements incrementally. Until such time as the Respondent receives written approval from the Director, Respondent must abide by the terms and conditions of this Consent Agreement, in its entirety.

12. On July 29, 2011, Respondent submitted to PHMSA a *Girth Weld Integrity Assessment Plan* that included conducting appropriate tests, analyses, evaluations, pressure reductions and remediation actions to establish integrity of certain sections of its system. The plan called for in-line inspection assessment, investigative digs, and girth weld examinations of Operating Sections 2, 3, and 5 of the Millennium pipeline system.³ Respondent agrees to complete the work required by this plan and to provide the results to PHMSA at established intervals. The actions and timetables required by this plan are set forth in Sections 20-22.
13. The Millennium pipeline system extends from Independence in Steuben County, New York to Buena Vista in Rockland County, New York. The pipeline is configured in six Operating Sections, as described below:
- **Section 1:** Independence to Corning Compressor Station. Section 1 is comprised of pipe with diameters of 10 and 12-inches and operates at a maximum allowable operating pressure (MAOP) of 1,000 psig. The pipeline was installed in the 1950's and is 37.2 miles long.
 - **Section 2 (Leak Section):** Corning Compressor Station to Bush Hill, NY (pig receiver). Section 2 is comprised of 30-inch diameter pipe and operates at a MAOP of 1,200 psig. This section is 93.4 miles long.
 - **Section 3:** Bush Hill to Huguenot, NY. Section 3 consists of 30-inch pipe until Huguenot, where the diameter changes to 24-inches. Section 3 operates at an MAOP of 1,200 psig and was installed in 2008. The Wagoner regulator station is in this section and limits pressure downstream of this station to 920 psig. Section 3 is 59.3 miles long.
 - **Section 4⁴:** Huguenot to Westtown, NY. Section 4 consists of 24-inch pipe with an MAOP of 920 psig. This section was installed in 1987⁵ and is 7.3 miles long. At Westtown, the diameter changes to 30-inches.
 - **Section 5:** Westtown, NY to Ramapo (pig receiver). Section 5 consists of 30-inch pipe and has an MAOP of 1,200 psig⁶. Section 5 is 30.2 miles long.

³ For a description of the Millennium pipeline system, reference paragraph 13. For purposes of this Agreement, Respondent subdivided the Millennium system into "Operating Sections," which share common characteristics, such as pipeline diameter and construction history. This Agreement is structured accordingly.

⁴ Due to the earlier construction period of this section, no remedial or investigative actions have been identified for Section 4 at this time.

⁵ Section 4 also contains a directional drill across Interstate 84, which was installed in 2008.

⁶ Section 5 is currently limited to an operating pressure of 920 psig due to it being downstream of Section 4. This operational pressure restriction is unrelated to this remedial plan.

- **Section 6:** Ramapo, NY to Buena Vista, NY. Section 6 is composed of 24-inch diameter pipe and has an MAOP of 936 psig. The pipe was installed in 1990 and is 6.7 miles long.
14. Respondent's procedures for the construction of the Millennium pipeline called for the non-destructive (NDT) testing of all carrier pipe welds. During its post-incident review of NDT in Operating Section 2 (Leak Section), Respondent identified four "suspect" welds or welds for which no NDT records were found.
- Suspect Weld 1 was the source of the leak and there are no records to show that this weld was evaluated through NDT before being installed in the field. The leaking weld was located at Station Number 2509+92, approximately 47.5 miles downstream of Corning Compressor Station.
 - Suspect Weld 2, identified as Double Joint Weld 7957, is a double joint weld located at Station Number 3041+72.56, approximately 57.6 miles downstream of Corning Compressor Station. Records for this weld do not indicate whether the weld passed or failed.
 - Suspect Weld 3, identified as Double Joint Weld 8974, is a double joint weld located at Station Number 2139+88.42, approximately 40.5 miles downstream of Corning Compressor Station. Records for Weld 8974 indicate that the weld was scheduled for an additional x-ray (NDT), but there is no evidence that a subsequent NDT was performed, or the outcome of any such evaluation.
 - Suspect Weld 4 is a Tie-in Weld located at Station Number 3414+27, approximately 64.7 miles downstream of Corning Compressor Station. As no weld number is associated with the weld, no NDT record can be retrieved that correlates with this weld.

15. OPERATING SECTION TWO (Affected Section) – Pressure Restriction

Columbia Gas will reduce the operating pressure from Corning to Bush Hill so that it does not exceed 80 percent of the highest actual operating pressure during the 60-day period immediately prior to discovery of the January 11, 2011 leak. The highest actual operating pressure was seen at the discharge of the Corning Compressor Station on January 9, 2011. The recorded pressure was 1174 psig. The pressure has been reduced to 938 psig⁷, and is being maintained through the set point of overpressure protection devices at receipt points on the section of pipeline from Corning Compressor Station to the Wagoner Regulating Station to ensure the pressure restriction is not exceeded. This pressure restriction will remain in effect until Millennium can demonstrate to the Regional Director that the girth weld assessment for Operating Section 2, including the ILI, three investigative digs, a minimum of three verification digs, and a minimum of two metal loss verification digs and any necessary remediation, has been completed and that returning the line to

⁷ In an August 19, 2011 written progress letter, Respondent indicated that the pressure in this Operating Section was reduced to 938 psig.

its original Maximum Allowable Operating Pressure (MAOP) is justified based on a reliable engineering analysis. This analysis must show that a pressure increase is safe considering all known defects (either repaired or remaining), anomalies, the outcome of girth weld evaluations and operating parameters in the pipeline.

16. SECTIONS 2, 3, and 5 - Girth Weld Integrity Assessment

- A. Respondent agrees to conduct assessments using in-line inspection methods. A high resolution magnetic flux leakage (HRMFL) tool⁸ and a deformation tool, capable of adequately characterizing girth weld integrity, will be run in combination with an inertial measurement unit (IMU) to assess the integrity of the girth welds and the overall condition of the pipe in Sections 2, 3 and 5.
- B. A deformation tool will be run at the same time as the HRMFL tool to assess the pipe for deformations (dents, ovalities, etc.). The ILI inspection tool will also be equipped with an IMU data logger. The IMU will facilitate the accurate mapping of anomaly indications and will be used to verify the accuracy of the mapped pipeline route.
- C. The application of the HRMFL tool and deformation tools will also include a general assessment of the pipe wall. Any anomalous conditions requiring investigation and remediation will be addressed, according Respondent's obligations under 49 C.F.R. Part 192.
- D. ILI assessment of Sections 2,3, and 5 will occur in three separate, instrumented pig runs, as follows:

LIST OF PLANNED ILI ASSESSMENTS

Section No.	Launch Location	Permanent Pig Launcher?	Receipt Location	Permanent Pig Receiver	Approximate Run Length (Miles)
2	Corning Compressor Station	Yes	Bush Hill Receiver	Yes	93.4
3	Bush Hill	Yes	Huguenot	No	59.3
5	Westtown	No	Ramapo	Yes	30.2

- E. A pig receiver will be installed at both Huguenot and Westtown to complete the inspection of Operating Sections 3 and Section 5, respectively. In preparation for the instrumented pig runs, cleaning pigs will be run through the 30-inch portions of the pipeline to remove any liquids or debris.
- F. Upon completion of each ILI run, the data will be immediately downloaded and translated into a readable format. Data quality checks will then be performed

⁸ The HRMFL tool is capable of accurately assessing pipe for external and internal corrosion, third party damage (gauges or other metal loss) and construction related defects, including girth weld defects similar to the leak anomaly.

(review of tool speed, data volume, distance readings, sensor indications, AGMs, etc.) to ensure that data is of an acceptable quality. If the data is determined to be of unacceptable quality, the run will be considered failed and the inspection will be repeated.

- G. Respondent agrees that preliminary ILI reports from successful runs will be received from the vendor within 15 days following each run and reviewed by an Integrity Engineer within 10 days of receipt. Preliminary reports will be reviewed to determine the presence of any anomaly indications requiring immediate or urgent action.
- H. Prior to running the tool, Respondent will demonstrate the capabilities of the tool 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. In addition, Respondent will develop an assessment plan (the Plan) outlining the steps that will be used to analyze the integrity of the circumferential girth welds in the Affected Section. The Plan will be submitted to the Regional Director for approval.

17. SECTIONS 2, 3, and 5 - Investigative Digs and Girth Weld Examinations

- A. Any girth weld indications called out by the vendor will be reviewed and prioritized. From the prioritized list of girth weld indications, a minimum of three indications will be chosen as verification digs. Based on the results of these three verification digs, additional girth weld indications may be chosen from the prioritized list for additional verification digs. All identified actionable anomaly indications will be scheduled for examination following the criteria covered above. Prior to excavations, including those indications requiring immediate response, Respondent will notify the Regional Director, his designate and the NYDPS.⁹ A minimum of five investigative digs will be completed for each ILI run to include the required two metal loss anomaly indications and three girth welds.
- B. If no actionable metal loss anomalies are determined from the ILI report, dig locations will be selected considering metal loss indications showing the greatest depth or lowest failure pressure ratio as verification digs. If no girth weld indications are determined from the ILI report, dig locations will be selected for girth weld examination in locations where NDT records may be lacking. Radiographs of the subject girth welds will be taken during each girth weld investigative dig.
- C. In addition, Respondent agrees that the following welds will be excavated and subjected to NDT during the investigation. These “suspect” welds are outlined below:

⁹ Upon discovery of an immediate condition, the Respondent may proceed without delay and notify the Regional Director in due course.

- i. Double Joint Weld 7957
- ii. Double Joint Weld 8974
- iii. WLD UNKNOWN 870076 20469 (Station 3383+34) (Point Number 267951)

D. Respondent agrees that the Plan will be revised as necessary to incorporate new information obtained during the evaluations and associated remedial activities. Any revisions to the Plan will be submitted to the Regional Director for approval. The Regional Director may approve plan elements incrementally. The Plan shall become incorporated into the consent agreement.

18. SECTIONS 2, 3, and 5- Metal Loss Assessment

- A. Respondent agrees to use Section 3.5 of Respondent's O&M Plan 220.05.04, ILI Anomaly Investigation, Characterization and Scheduling¹⁰, which provides the anomaly indication investigation criteria that will be followed to determine remedial actions within High Consequence Areas¹¹ (HCAs) and Non-HCAs for other types of anomaly indications. This plan also contains pressure restriction requirements that will be followed should an immediate (within an HCA) or urgent (non-HCA) condition be indicated.
- B. Following examination, any corrosion, pipe defect or girth weld indication requiring repair will be repaired in accordance with Respondent's O&M Plan 220.02.01 "Pipeline Repair and Realignment."
- C. A dig data report package will be prepared to document each excavation. The dig data report package will include dig location data, pipeline information, anomaly measurements, calculations (as applicable), pipe environment data and pictures.

19. OPERATING SECTION 2 TIMELINE

- A. The pipeline from Corning Compressor Station to Bush Hill (Operating Section No. 2 - Leak Section) is presently equipped with permanent launchers and receivers and was assessed by in-line inspection, (as described in Section 3.0 "In-Line Inspection," above) on July 14, 2011. Within 60 days following a successful ILI run, a final report will be issued by the vendor and within 45 days following receipt, an Integrity Engineer will quality check the data and, if acceptable, review the report for actionable anomaly indications. A minimum of five investigatory digs, including at least three girth welds indications and two metal loss verification digs will be selected (based upon ILI results). In addition, the following welds will be excavated and subject to NDT during the investigation.
 - i. Double Joint Weld 7957

¹⁰ This Agreement explicitly incorporates by reference Section 3.5, O&M Plan 220.05.04 and 220.02.01. See Appendix B.

¹¹ For purposes of this Agreement, a High Consequence Area (HCA) is defined by §192.903.

- ii. Double Joint Weld 8974
- iii. WLD UNKNOWN 870076 20469 (Station 3383+34) (Point Number 267951)

The work outlined above will be completed before December 31, 2011.

20. OPERATING SECTION 3 TIMELINE

- A. Respondent agrees that all work will be completed no later than December 31, 2012. In-line inspection of Section 3 (Bush Hill to Huguenot) requires the addition of a receiver. The following work will be completed following the timeline below:

Activity Anticipated Completion Date

Installation of receiver at Huguenot	March 30, 2012
Complete In-line inspection activities	April 30, 2012
ILI report issued by vendor	June 15, 2012
Completion of field investigation of all actionable anomalies	September 15, 2012
Preparation of dig reports	November 1, 2012

- B. Respondent will coordinate with both PHMSA, Eastern Region Director, his designate, and the New York State Department of Public Service (NYDPS) as soon as practical, should it appear that any part of the in-line inspection and investigatory dig schedule, as stated above, cannot be met.

21. OPERATING SECTION 5 TIMELINE

- A. Respondent agrees that all work will be completed no later than December 31, 2012. In-line inspection of Section 5 (Westtown to Ramapo) requires the addition of a launcher. Respondent anticipates that the work could be completed following the timeline below:

Activity Anticipated Completion Date

Installation of launcher at Westtown	March 30, 2012
Complete In-line inspection activities	April 30, 2012
ILI report issued by vendor	June 15, 2012
Completion of field investigation of all actionable anomalies	September 15, 2012
Preparation of dig reports	November 1, 2012

B. Respondent will coordinate with both PHMSA, Eastern Region Director, his designate and the NYDPS as soon as practicable, should it appear that any part of the in-line inspection and investigatory dig schedule, stated above, cannot be met.

22. As an additional assurance measure, Millennium will perform a girth weld integrity assessment on Operating Sections 3 and 5 prior to December 31, 2012.

III. Review and Approval Process

23. Unless stated otherwise below, the Respondent must submit the following to both the PHMSA Eastern Region and the Chief Safety Office of the NYDPS:

- A. A summary report detailing the in-line inspection results for each successful instrumented in-line inspection (within 90 days following issuance of final in-line inspection report for each successful run).
- B. A listing of proposed pipe examinations and digs will be submitted a minimum of 7 days prior to excavation, except where immediate anomaly indications within HCAs are determined. In the case of immediate indications, PHMSA will be notified as soon as practicable, upon discovery, but at least 24 hours prior to excavation.
- C. A final dig data report package will be submitted 60 days following each excavation.
- D. Monthly reports (due during the 4th week of each month) will be submitted 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 undertaken in the preceding 5 weeks.
- E. Respondent will maintain documentation of the safety improvement costs associated with fulfilling this Safety Order and submit the total to Regional Director. These costs will be reported in two categories:
 - i. total cost associated with preparation/revision of plans, procedures, studies and analyses; and
 - ii. total cost associated with replacements, additions and other changes to pipeline infrastructure.

24. With respect to any submission under Section II of this Agreement that requires the approval of the Director, the Director may: (a) approve, in whole or in part, the submission; (b) approve the submission on specified conditions; (c) disapprove, in whole or in part, the submission; or (d) any combination of the foregoing. In the event of such approval, Respondent will proceed to take all actions required by the submission, as approved by the Director. In the event that the Director disapproves all or any portion of a submission, Respondent will be provided with a written notice

of the deficiencies. Respondent will correct all deficiencies within the time specified by the Director and resubmit it for approval.

IV. Dispute Resolution

25. Respondent may appeal any decision made by the Director under this Agreement to the Associate Administrator. Decisions of the Associate Administrator shall be final. The existence of any dispute or PHMSA's consideration of matters placed in dispute shall not excuse, toll, or suspend any term or timeframe for completion of any work to be performed under this Agreement during the pendency of such dispute resolution process, except as agreed upon in writing by the Director or the Associate Administrator.

V. Enforcement

26. This Agreement, as adopted by the Consent Order, is subject to all enforcement authorities available to PHMSA under 49 U.S.C. §§ 60101, *et seq.*, and 49 C.F.R. Part 190, including administrative civil penalties under 49 U.S.C. § 60122, of up to \$100,000 per violation for each day the violation continues. This shall include any failure of Respondent to comply with the terms of this Agreement, including determinations made by the Director, or, if appealed under Paragraph 24 above, by the Associate Administrator. All work plans and associated schedules set forth or referenced in Section II shall be automatically incorporated into this Agreement and are enforceable in the same manner.

VI. Recordkeeping and Information Disclosure

27. Respondent agrees to maintain records demonstrating compliance with all requirements of this Agreement for a period of at least five years following completion of all work required by this Agreement. For any reports, plans, or other deliverables required to be submitted to PHMSA pursuant to this Agreement, Respondent may assert a claim of business confidentiality or other protections applicable to the release of information by PHMSA, covering part or all of the information required to be submitted to PHMSA pursuant to this Agreement in accordance with 49 C.F.R. Part 7. Any claim of confidentiality shall be marked in writing on each page, and shall include a statement specifying the grounds for each claim of confidentiality. PHMSA will determine release of any information submitted pursuant to this Agreement in accordance with 49 C.F.R. Part 7, the Freedom of Information Act, 5 U.S.C. § 552, DOT and PHMSA policies, and other applicable regulations and Executive Orders.

VII. Effective Date

28. The "Effective Date" as used herein is the date on which this Consent Agreement has been signed by both Respondent and PHMSA.

VIII. Entire Agreement; Modification

29. This Consent Agreement constitutes the final, complete and exclusive agreement and understanding between the Parties with respect to the settlement embodied in this Agreement, and the Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Agreement, except that the terms of this Agreement will be construed by reference to the Notice.
30. The terms of this Agreement may be modified by mutual agreement of the Parties. Such modifications will be in writing and signed by both Parties.

IX. Termination


31. This Agreement will terminate upon the completion of all terms set forth in Section II above. Respondent may request written confirmation from PHMSA when this Agreement is terminated. To the extent ongoing monitoring is required, PHMSA may terminate this Agreement with respect to all other requirements, with the exception of such monitoring. Nothing in this Agreement prevents Respondent from completing any of the obligations earlier than the deadlines provided for herein.

X. Ratification

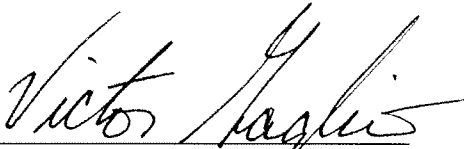
32. The Parties' undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind such party to this document.
33. The Parties hereby agree to all conditions and terms of this Agreement:

For PHMSA:

For Respondent:



 Byron Coy
 Director, Eastern Region
 Office of Pipeline Safety
 PHMSA



 Victor Gaglio
 Senior Vice President, Operations
 NiSource Gas Transmission & Storage

09-21-2011

 Date

9/19/2011

 Date

Information, reports, and notifications required by this Safety Order will be submitted to:
 a) Director, Eastern Region, PHMSA Office of Pipeline Safety, 820 Bear Tavern Road, Suite 103, West Trenton, New Jersey 08628; and b) Gavin Nicoletta, Chief-Safety Section, New York