

DEC 06 2011

VIA CERTIFIED MAIL AND FAX TO: 713-215-4269

Mr. Alan Armstrong
Chairman of the Board and Chief Executive Officer
Williams Partners L.P.
2800 Post Oak Boulevard
Houston, TX 77056

Re: CPF No. 2-2011-1011H

Dear Mr. Armstrong:

Enclosed is a Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It finds that a portion of your Transco natural gas pipeline system is hazardous to life, property, or the environment as a result of the December 3, 2011 failure that occurred in Marengo County, Alabama. It also requires you to take certain corrective actions.

Service is being made by certified mail and facsimile. Your receipt of this Corrective Action Order constitutes service of that document under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon receipt.

Sincerely,

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Enclosure: Corrective Action Order and Copy of 49 C.F.R. §190.233

cc: Mr. Wayne Lemoi, Director, Southern Region, PHMSA
Mr. Alan Mayberry, Deputy Associate Administrator for Field Operations, Pipeline Safety

Mr. Larry Hjalmarson, Vice President, Safety Environmental & GP Integrity,
Williams Partners L.P., 2800 Post Oak Boulevard, Houston, TX 77056

**U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590**

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In the Matter of)	
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Williams Partners L.P.,)	CPF No. 2-2011-1011H
)	
Respondent.)	
)	

CORRECTIVE ACTION ORDER

Williams Partners L.P. (WPLP or Respondent),¹ is being issued a Corrective Action Order pursuant to the authority provided in 49 U.S.C. § 60112. The Order requires WPLP to take certain actions to protect the public, property, and the environment from the hazards associated with the operation of a portion of its Transco natural gas pipeline system (Transco).

On December 3, 2011, one of the five parallel natural gas pipelines in Transco ruptured in Marengo County, Alabama. The force of the rupture created a large crater and propelled a 47-foot, 3-inch piece of buried pipe more than 200 feet away. The releasing gas also ignited and continued to burn for several hours, causing damage to one of the adjoining pipelines and scorching approximately eight acres of surrounding property. There were no reported evacuations, injuries, or fatalities.

The Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), Southern Region, has initiated an investigation of the incident pursuant to the authority provided in 49 U.S.C. § 60117. The cause of the rupture has not yet been determined.

Preliminary Findings

- Transco is a 10,000-mile natural gas pipeline system that originates in South Texas. It receives natural gas in the Gulf Coast and Appalachia areas and delivers that product to consumers in the Southeast, Mid-Atlantic, and Northeastern United States, including metropolitan areas in Pennsylvania, New Jersey, and New York.

¹ WPLP is a master limited partnership. A larger company, Williams, owns approximately 75 percent of WPLP, including the controlling general partner interest. Williams operates three natural gas transmission lines in the United States: Northwest Pipeline, Transco, and Gulfstream Pipeline. The lines are approximately 15,000 miles in total length and deliver 14 percent of the natural gas consumed in this country. <http://www.williams.com/> (last accessed December 5, 2011).

- Depending on the location, Transco is composed of either three or five parallel, looped pipelines that are generally located in a common right-of-way (ROW).
- Transco crosses the Mississippi-Alabama border at Mile Post (MP) 778.34, proceeds in a northeasterly direction, and crosses the Alabama-Georgia border at MP 985.81.
- Transco includes a 79.5-mile segment in Alabama that extends from Compressor Station 90 (MP 811.13) to Compressor Station 100 (MP 890.61). That entire segment is in a Class 1 location, except for 0.59-mile portion, which is in a Class 2 location.
- MP 817.77 of the above segment is located in Marengo County, Alabama, approximately four to five miles southwest of Linden, Alabama.
- Five parallel, looped natural pipelines are located at MP 817.77:
 - Line A is a 30-inch natural gas pipeline with an established maximum allowable operating pressure (MAOP) of 800 pounds per square inch gauge (psig);
 - Line B is a 36-inch natural gas pipeline with an established MAOP of 800 psig;
 - Line C is a 36-inch natural gas pipeline with an established MAOP of 800 psig;
 - Line D is a 42-inch natural gas pipeline with an established MAOP of 800 psig; and
 - Line E is a 48-inch natural gas pipeline with an established MAOP of 800 psig.
- At approximately 3:08 p.m. Central Standard Time (CST) on December 3, 2011, Line C ruptured at MP 817.77.
 - The force of that rupture created a crater in the ground that is approximately 79.5-foot wide, 55-foot long, and 14.25-foot deep and propelled a 47-foot, 3-inch piece of buried pipe more than 200 feet away from the point of impact.
 - The rupture also resulted in the release of an unknown quantity of natural gas, which ignited and burned for several hours.
- At approximately 3:08 p.m. CST, personnel in the Houston Control Center received indications of a possible rupture on Transco and immediately notified the local operations manager. The local operations manager responded and provided visual confirmation of the rupture and fire at MP 817.77.
- At approximately 3:25 p.m. CST, the local operations manager closed the main line block valve (Valve 90- C-10) on Line C, located about 15 miles downstream of Compressor Station 90. At about that same time, another WPLP employee closed the side gate valve

(Valve 90-C-0) on Line C that is located at Compressor Station 90. The closure of these two valves isolated the affected segment.

- Six volunteer fire departments and a local sheriff responded to the incident.
- The fire at MP 817.77 damaged the coating on a 5-foot section of Line B and scorched approximately eight acres of surrounding property, including trees, brush, and grass.
- MP 817.77 is in a Class 1 location.
- WPLP has removed Lines B and C from service and is excavating the rupture site.
- Visual observations of Line C show indications of wall loss, possibly as a result of external corrosion, at MP 817.77.
- Transco has a prior history of cathodic protection concerns.
- Line C was installed in 1964 and constructed with API 5L X-60 pipe as manufactured by National Tube with a double submerged arc weld longitudinal seam.
- Line C has an impressed current cathodic protection system and is coated with asphalt enamel.
- The MAOP of Line C was established on the basis of the 5-year operating history prior to July 1970, and no subsequent hydrostatic pressure testing records are available at this time.
- The actual operating pressure of Line C at the time of the rupture was 795 psig.
- In October 2011, WPLP performed an inline inspection (ILI) of Line C from Compressor Station 80 to Compressor Station 100 and of Line B from Compressor Station 90 to Compressor Station 100. WPLP has not yet received the reports from these ILI runs.
- WPLP has not determined whether the conditions that caused the December 3, 2011 rupture exist on other portions of Transco.

Determination of Necessity for Corrective Action Order and Right to Hearing

Under 49 U.S.C. § 60112 and 49 C.F.R. § 190.233, the Associate Administrator may issue a corrective action order after providing reasonable notice and the opportunity for a hearing if he finds that a particular pipeline facility is or would be hazardous to life, property, or the environment. The terms of such an order may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or any other action as appropriate. The Associate Administrator may also issue a corrective action order without providing any notice or the opportunity for a hearing if he finds that a failure to do so expeditiously will result in likely serious harm to life, property or the environment. The

opportunity for a hearing will be provided as soon as practicable after the issuance of the CAO in such cases.

After evaluating the preliminary findings, I find that the continued operation of Line C without corrective measures would be hazardous to life, property, and the environment. The portion of Line C that failed is more than 40 years old, and its installation occurred before the issuance of the minimum federal standards for natural gas pipeline systems. Certain operating records for that line are not available at this time, including the results of any post-installation hydrostatic pressure testing and a recent ILI inspection. Visual observations at the failure site also show indications of wall loss as a result of external corrosion, and Transco has a history of cathodic protection concerns on other segments. The force of the rupture created a large crater and propelled a buried piece of pipe more than 200 feet away from the point of impact. The ensuing fire also damaged an adjoining pipeline and scorched 8 acres of surrounding property. WPLP has not determined whether the conditions that caused the failure exist on other portions of Transco.

Considering the age and date of installation of the pipe, the circumstances surrounding the rupture, the hazardous nature of the product being transported, the remaining uncertainties as to the cause of the rupture, and the ongoing status of the OPS failure investigation, I find that a failure to issue this Order expeditiously to require immediate corrective action would result in likely serious harm to life, property, and the environment. Accordingly, this Corrective Action Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, Respondent may request a hearing, to be held as soon as practicable, by notifying the Associate Administrator for Pipeline Safety in writing, delivered personally, by mail or by telecopy at (202) 366-4566. The hearing will be held in Atlanta, Georgia, or Washington, D.C., on a date mutually convenient to PHMSA and Respondent.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. Respondent will be notified of any additional measures required and amendment of this Order will be considered. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

Required Corrective Action

Pursuant to 49 U.S.C. § 60112, I hereby order WPLP to immediately take the following corrective actions:

1. For purposes of this Order:
 - A. The “Affected Pipeline” means Transco Line C from Compressor Station 90 (MP 811.13) to Compressor Station 100 (MP 890.61).

B. The “Isolated Segment” means the 15-mile section of Line C from the Compressor Station 90 to MLV 90-C-10. The Isolated Segment is the portion of the Affected Pipeline that was shut-in immediately after the incident and that must remain shut-in pending an approved restart plan in accordance with Items 4 and 5 of this Order.

C. The “Director” means the Director, Southern Region, OPS, Pipeline and Hazardous Materials Safety Administration, 233 Peachtree Street, Suite 600, Atlanta, GA 30303.

2. The operating pressure along the Affected Pipeline must not exceed eighty percent (80%) of the actual operating pressure in effect immediately prior to the December 3, 2011 rupture (i.e., WPLP will reduce, if required, and maintain a 20% pressure reduction in the operating pressure along the entire length of the Affected Pipeline). This pressure restriction will remain in effect until written approval to increase the pressure or return the pipeline to its pre-failure operating pressure is obtained from the Director pursuant to Item 16 or 17. By December 10, 2011, provide the Director a listing of the actual operating pressure at the Compressor Stations 90 and 100 on Line C at the time of failure, and the reduced discharge pressure settings at each compressor station.
3. WPLP must not operate the Isolated Segment until authorized to do so by the Director.
4. Prior to resuming operation of the Isolated Segment, WPLP must develop and submit a written restart plan for prior approval to the Director. The restart plan must include actions to confirm the integrity of the Isolated Section. The restart plan must address incremental pressure increases and patrolling of the Isolated Section following each pressure increment. The restart plan should specify a day-light restart and detail advance communications with local emergency response officials.
5. After receiving authorization from the Director to restart the Isolated Segment, the pressure must not exceed 636 psig along the entire Affected Pipeline. This pressure restriction will remain in effect until written approval to increase the pressure or return the pipeline to its pre-failure operating pressure is obtained from the Director pursuant to Item 16 or 17.
6. Within 45 days of receipt of this Order, complete mechanical and metallurgical testing and failure analysis of the failed pipe, including analysis of soil samples and any foreign materials. Complete the testing and analysis as follows:
 - A. Document the chain-of-custody when handling and transporting the failed pipe section(s) and other evidence from the failure site;
 - B. Utilize the mechanical and metallurgical testing protocols, including the testing laboratory approved by the Director;
 - C. Prior to commencing the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow a PHMSA representative to witness the testing; and

- D. Ensure that the testing laboratory distributes all resulting reports in their entirety (including all media) whether draft or final, to the Director at the same time as they are made available to WPLP.
7. Within 15 days following receipt of this Order, submit a report to the Director identifying any sections of the Affected Pipeline where any buildings intended for human occupancy are within the Potential Impact Radius (as defined in 49 C.F.R. § 192.903), all road and railway crossings, all High Consequence Areas (*see* 49 C.F.R. §§ 192.903 and 192.905), and all Class 2, 3, and 4 locations.
8. Within 30 days of receipt of this Order, perform an aerial instrument or ground instrumented leakage survey of the Affected Pipeline. WPLP must investigate all leak indications and remedy all leaks discovered. WPLP must submit documentation of this survey to the Director within 45 days of receipt of this Order.
9. Within 90 days following receipt of this Order, complete a failure root cause analysis (RCA) for the December 3, 2011 incident that is supplemented and facilitated by an independent third-party acceptable to the Director. Elements of the RCA must include but are not limited to: a scoping document of the RCA; procedures associated with RCA; the methods used for the analysis and updates on each method as it progresses; and, a study and analysis of factors that may have contributed to the failure. The RCA must document all contributory factors and the decision-making process. Submit a final report of the RCA results to the Director including any lessons learned and whether the findings are applicable to other locations and pipelines within the Transco system.
10. Within 90 days of receipt of this Order, submit to the Director for approval an Integrity Verification and Remediation Plan (IVRP) to investigate, evaluate, and remediate the Line B & C pipelines. The IVRP will include, at a minimum, the following actions:
 - A. Identify pipe in the Affected Pipeline and parallel Line B with characteristics similar to the contributing factors identified for the December 3, 2011 failure;
 - B. Perform an evaluation of the Affected Pipeline and parallel Line B based on the findings of the mechanical and metallurgical study performed as required by Item 6 and of the RCA required by Item 10.
 - C. Determine if conditions similar to those contributing to the failure are likely to exist elsewhere on the Affected Pipeline or the parallel Line B;
 - D. Develop and implement an integrity testing plan. The integrity testing plan must address all factors known or suspected in the failure and consider all available information including, but not limited to, comparison of previously conducted internal inspection tool results, cathodic protection testing or other integrity verification information. The plan may include but is not limited to internal inspection tool surveys, pressure testing, coating surveys, and remedial action. The type of internal inspection tools or other testing used must be technologically appropriate for assessing the system based on the type of failure that occurred on December 3, 2011. Determination of excavation

and repair of anomalies and imperfections will be per the criteria used in evaluating the pipeline in Item 10(A). Also, as a minimum, the following excavation and repair criteria will apply:

1. Immediate response or repair: Any anomaly within a pipeline operating up to 72% SMYS that meets either: (1) a Failure Pressure Ratio (FPR) equal to or less than 1.1; or (2) an anomaly depth equal to or greater than 80% wall thickness loss.
2. One-year response or repair: Any anomaly that meets either: (1) an FPR less than design factor – for Class 1 location- FPR equal to or less than 1.39; for Class 2 location – FPR equal to or less than 1.67; and for Class 3 location – FPR equal to or less than 2.0; or (2) an anomaly depth equal to or greater than 60% wall thickness loss.

Any anomaly for Class location changes from original Class 1 to 2 location or original Class 2 to 3 location in accordance with §§ 192.5 and 192.611 that meets either: (1) an anomaly FPR equal to or less than the FPR of the original Class location ; or (2) an anomaly depth equal to or greater than 50% wall thickness loss.

3. Monitored response: Any anomaly that meets both: (1) an FPR less than design factor – for Class 1 location – FPR greater than 1.39; Class 2 location – FPR greater than 1.67; and for Class 3 location – FPR greater than 2.0; and (2) an anomaly depth less than 60% wall thickness loss.

Any anomaly repairs for Class location changes from original Class 1 to 2 location or original Class 2 to 3 location in accordance with §§ 192.5 and 192.611 that meets both: (1) an anomaly FPR greater than the FPR of the original Class location; and (2) an anomaly depth less than 50% wall thickness loss.

- E. Provide to the Director a detailed description of the inspection and repair criteria to be used in the field evaluation of the anomalies that are excavated, to include a description of how any defects are to be graded (if appropriate) and a schedule for repairs or replacement;
- F. Remediate any pipe in the Affected Pipeline and the parallel Line B identified as having the potential to fail as soon as conditions permit; focus on areas where there is a potential threat to life, property or the environment;
- G. A process for extending the IVRP to the entire length of Lines B & C should the results of the evaluation, testing, and remediation indicate a potential systemic issue on the Transco system; and,
- H. Provide a proposed schedule for completion of the actions required by paragraphs (A) through (G) of this Item.

11. The IVRP will be incorporated into this Order. WPLP must revise the IVRP as necessary to incorporate the results of actions undertaken pursuant to this Order and whenever necessary to incorporate new information obtained during the failure investigation and remedial activities. Submit any such plan revisions to the Director for prior approval. The Director may approve plan elements incrementally.
12. Implement the IVRP as it is approved by the Director, including any revisions to the plan.
13. Submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Order, and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report for the period from December 3, 2011, through March 31, 2012, must be submitted by April 30, 2012. Each subsequent quarterly report must be submitted by the last day of the month following the last month of the quarter; e.g. July 31, 2012, for the second quarter of 2012, and October 31, 2012, for the third quarter of 2012.
14. It is requested but not required that WPLP maintain documentation of the costs associated with implementation of this Corrective Action Order. Include in each quarterly report submitted, the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.
15. With respect to each submission that under this Order requires the approval of the Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that WPLP modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, WPLP must proceed to take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, WPLP must correct all deficiencies within the time specified by the Director, and resubmit it for approval.
16. The Director may allow the permanent removal of the pressure restriction set forth in Item 3 upon a written request from WPLP demonstrating that the hazard has been abated and that restoring the pipeline to its pre-failure operating pressure is justified based on a reliable engineering analysis showing that the pressure increase is safe considering all known defects, anomalies and operating parameters of the pipeline.
17. The Director may allow the temporary removal or modification of the pressure restrictions set forth in Item 2 upon a written request from WPLP demonstrating that temporary mitigative and preventive measures are implemented prior to and during the temporary removal or modification of the pressure restriction. The Director's determination will be based on the failure cause and provision of evidence that preventative mitigative actions taken by the operator provide for the safe operation of the pipeline segment during the temporary removal or modification of the pressure restriction.

18. The Director may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension

The actions required by this Corrective Action Order are in addition to and do not supersede or waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Part 192, any other order issued to Respondent under authority of 49 U.S.C. § 60101 et seq., or any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator shall be final.

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

The terms and conditions of this Corrective Action Order are effective upon receipt.

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Date Issued