U S Department
of Transportation
Pipeline and Hazardous Materials Safety Administration

1200 New Jersey Ave., S.E.
Washington, DC 20590

JAN 11 2008

VIA CERTIFIED MAIL AND FACSIMILE TO: (918) 574-7003

Mr. Rick Olson
Vice President of Pipeline Operations
Magellan Pipeline Company, LP
One Williams Center
Tulsa, OK 74121-2186

Re: CPF No. 4-2008-5001H

Dear Mr. Olson:

Enclosed is a Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It requires you to take certain corrective actions with respect to your pipeline that failed on January 5, 2008. 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 Corrective Action Order are effective upon receipt.

We look forward to a successful resolution of concerns arising out of the recent pipeline failure to ensure pipeline safety. Please direct any questions on this matter to me at (713) 272-2859.

Sincerely,

for R. M. Seeley
Director, Southwest Region

Enclosures

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

In the Matter of	)	
Magellan Pipeline Company, LP,	)	**CPF No. 4-2008-5001H**
Respondent	)	

CORRECTIVE ACTION ORDER

Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Magellan Pipeline Company, LP (Respondent), to take necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure involving Respondent's hazardous liquids pipeline.

On January 5, 2008, a failure occurred on Respondent's #3-12 petroleum products pipeline near Oologah, Oklahoma, resulting in the release of gasoline. The cause of the failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA) initiated an investigation of the accident.

Preliminary Findings

- At approximately 4:16 a.m. local time on January 5, 2008, Respondent's #3-12 Tulsa to Sheldon Pipeline (hereafter "the affected pipeline") failed near the city of Oologah, Oklahoma (Rogers County). The accident has been reported to the National Response Center.

- Respondent reported to PHMSA that the failure resulted in the release of approximately 1,075 barrels of gasoline. No fires, injures, fatalities, or evacuations were reported in connection with the pipeline accident. Product migrated into a nearby creek.

- Following an indication of a pipeline failure on its SCADA system, Respondent shut down pumps at its Tulsa Pump Station and activated automated valves. Personnel located the site of the leak based on a call from a landowner. Personnel manually

closed valves upstream and downstream of the failure site. Respondent activated a spill response team that boomed the creek beyond the point of product movement and began recovering product using vacuum trucks. Respondent excavated the affected pipeline at the accident site and tapped the line upstream of the failure site to remove product from the pipeline in order to minimize loss at the leak site.

- Respondent removed and replaced a 160-foot section of the affected pipeline, including the failure site and a nearby sleeve that had been installed in July 2007. The removed section of pipe has been sent to a metallurgist in Worthington, Ohio for analysis. Pressure was returned to the affected pipeline on January 8, 2008. Respondent is planning to increase pressure to 80 percent of the actual operating pressure on the line immediately prior to the failure.

- The cause of the failure has not yet been determined. A preliminary visual examination indicates a failed bell and spigot girth weld. PHMSA inspectors observed a crack in the girth weld several inches long and approximately 1/16- to 1/8-inch wide. The girth weld was located approximately 15 feet downstream from where Respondent had excavated the line in July 2007 to install a 32-foot sleeve. Respondent has performed many excavations on the affected pipeline to install approximately 75 sleeves based on the results of an inline inspection performed in December 2006.

- The affected pipeline starts at the Tulsa Pump Station in Tulsa, Oklahoma. Product travels 4.5 miles through newer vintage pipe to Tulsa Junction. At Tulsa Junction, the pipe changes to 1929 bell and spigot pipe for most of the 140 miles to Sheldon Pump Station in Sheldon, Missouri. The pipeline continues from Sheldon Pump Station to Columbia, Missouri in newer vintage pipe that is not bell and spigot construction except for a small 1900-foot section several miles north of Sheldon. The failure occurred on a bell and spigot portion of pipe in Oologah, Oklahoma, approximately 28 miles downstream of the Tulsa Pump Station. The amount of bell and spigot pipe on the #3-12 Pipeline is as follows: 67.5 miles in Oklahoma, 37.5 miles in Kansas, 26.7 miles in Missouri.

- The pipeline travels through or near several populated areas and high consequence areas in Oklahoma, Kansas, and Missouri, including Tulsa, Oklahoma, Lake Oolagah, Oklahoma, and Pittsburg, Kansas. The pipeline also crosses many public highways in those states, including US highways 75, 169, 60, 160, 166, 59, and 71.

- Gasoline from the spill migrated to nearby Four Mile Creek and traveled about 1/2-mile downstream. Federal and state environmental agencies were onsite to evaluate environmental impacts. Migration was contained at approximately 8 boom locations. Approximately 300 fish were reported killed. PHMSA inspectors observed that product had been mostly removed and the creek banks were cleaned by January 8, 2008.

- According to Respondent, the pipe that failed is 12.75-inch nominal diameter, 0.303-inch wall thickness, Grade 24,000, flash welded longitudinal seam pipe with coal tar coating, manufactured by A.O. Smith and constructed in 1929. The pipe uses bell and spigot joint connections. The pipeline is cathodically protected.

- According to Respondent, the established maximum operating pressure (MOP) of the pipeline that failed is 787 psig, established in 1983 by an 8-hour hydrostatic test. Actual operating pressure at the Tulsa Pump Station immediately prior to the accident was 694 psig. Based on Respondent's calculations, actual operating pressure at the failure site immediately prior to the accident was approximately 598 psig.

- From 1986 through 1997, approximately 12 leaks have occurred on bell and spigot portions of the affected pipeline. No leaks were reported on those portions since 1997 until the January 5, 2008 failure. Nearly all of the prior leaks on the affected pipeline have been attributed to external corrosion. One leak that occurred in 1986 involved a weld split, but it is not presently known if the weld was a seam weld or girth weld.

- Respondent reports that it performed an inline inspection of the affected pipeline in January 2002 using a magnetic flux leakage tool, followed by a geometry tool in March 2002. The most recent inline inspection was performed in December 2006 using a combination geometry and magnetic flux leakage tool. A close interval survey was performed in January 2004.

Determination of Necessity for Corrective Action Order and Right to Hearing

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action, as appropriate. The basis for making the determination that a pipeline facility is hazardous, requiring corrective action, is set forth both in the above-referenced statute and 49 C.F.R. § 190.233, a copy of which is enclosed.

Section 60112 of Title 49, and the regulations promulgated thereunder, provide for the issuance of a Corrective Action Order without prior opportunity for notice and hearing upon a finding that failure to issue the Order expeditiously will likely result in serious harm to life, property, or the environment. In such cases, an opportunity for a hearing will be provided as soon as practicable after the issuance of the Order.

After evaluating the foregoing preliminary findings of fact, I find that continued operation of the affected pipeline without corrective measures would be hazardous to life, property, and the environment. Additionally, I have considered the possibility that the recent installation of 75 sleeves on the pipeline may have contributed to the January 5, 2008 failure and that a similar failure elsewhere on the pipeline near another sleeve is imminent. I have considered the possibility that the pipeline's support was disturbed by the associated excavation activity, subsequent settling of the ground, and added weight of the sleeves. I have also considered the

age of the pipe (it is approximately 80 years old), the bell and spigot method of construction, the proximity of the pipeline to waterways, populated areas, public roadways, and high consequence areas, the hazardous nature of the refined petroleum products being transported, the pipeline pressure required for transporting such product, and the ongoing investigation to determine the cause of the failure. After considering the foregoing, I find that a failure to expeditiously issue this Order requiring immediate corrective action would result in the likelihood of serious harm to life, property, or 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, with a copy to the Director, Southwest Region, PHMSA. If a hearing is requested, it will be held telephonically or in-person in Houston, Texas, or Washington, D.C., on a date that is 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. In that event, 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 Magellan Pipeline Company, LP to immediately take the following corrective actions with respect to the affected pipeline from Tulsa Pump Station to Sheldon Pump Station:

1. The operating pressure on the affected pipeline shall not exceed 80 percent of the actual operating pressure in effect immediately prior to the January 5, 2008 failure. At the Tulsa Pump Station, specifically, operating pressure shall not exceed 475 psig. 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, Southwest Region, PHMSA (Director) as set forth in Item 8. If the results of any action undertaken pursuant to this Order necessitate a reduction in the allowable operating pressure permitted by this Order, Respondent must further reduce the allowable operating pressure accordingly.

2. Within 30 days of receipt of this Order, complete mechanical and metallurgical testing and failure analysis of the failed pipe. The testing and analysis shall be completed as follows:

   (A) When handling and transporting the failed pipe section and other evidence from the failure site, document the chain of custody;

(B) Obtain the Director's prior approval of the mechanical and metallurgical testing protocols;

(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, whether draft or final, to the Director at the same time they are made available to Respondent.

3 Within 60 days of receipt of this Order, develop and submit to the Director for prior approval a written remedial work plan that includes corrective measures. The work plan must fully address all known or suspected factors that caused or contributed to the January 5, 2008 failure and must include, as applicable:

(A) The integration of the information developed from the actions required by Item 2 with any relevant pipeline system information, including: previous failure investigations, leak history, repair records, corrosion control/cathodic protection records, internal inspections, hydrostatic testing, changes in pressure cycling, operating procedures, and other relevant operating data for the purpose of performing a comprehensive analysis of the available information associated with the factors that caused or contributed to the failure;

(B) The performance of field testing, inspections, and evaluations to determine whether and to what extent the conditions associated with the failure, or any other integrity-threatening conditions, are present elsewhere on the affected pipeline. Include a detailed description of the criteria to be used for the evaluation and prioritization of any integrity threats/anomalies that are identified. Make the results of the inspections, field excavations, and evaluations available to PHMSA;

(C) The performance of repairs or other corrective measures that fully remediate the condition(s) associated with the pipeline failure and any other integrity-threatening condition everywhere along the affected pipeline where such conditions are identified by the evaluation process. Include a detailed description of the repair criteria and method(s) to be used in undertaking any repairs or other remedial actions;

(D) Provisions for continuing long-term periodic testing and integrity verification measures to ensure the ongoing safe operation of the pipeline considering the results of the analyses, inspections, and corrective measures undertaken pursuant to this Order; and

(E) A proposed schedule for completion of the actions required by paragraphs (A) through (D) of this Item.

4 The remedial work plan becomes incorporated into this Order and shall be revised as necessary to incorporate new information obtained during the failure investigation and remedial activities undertaken pursuant to this Order. Submit any such plan revisions to the Director for prior approval. The Director may approve plan elements incrementally.

5. Implement the work plan as it is approved by the Director, including any revisions to the plan.

6. Submit quarterly reports to the Director that: (1) include available data and results of the testing and evaluations required by this Order; and (2) describe the progress of the repairs and other remedial actions being undertaken. The first quarterly report shall be due April 1, 2008.

7. Maintain documentation of the costs associated with implementation of this Corrective Action Order. Include in each quarterly report submitted pursuant to Item 6, 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.

8. The Director may allow the removal or modification of the pressure restriction set forth in Item 1 upon a written request from Respondent demonstrating that the hazard has been abated and that restoring the affected pipeline, or portion thereof, 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.

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.

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 the deficiencies; (d) disapprove in whole or in part, the submission, directing that Respondent modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, Respondent shall proceed to take all action required by the submission as approved or modified by the Director. In the event that the Director disapproves all or any portion of the submission, Respondent shall correct all deficiencies within the time specified by the Director, and resubmit it for approval. In the event that a resubmitted item is disapproved in whole or in part, the Director may again require Respondent to correct the deficiencies in accordance with the foregoing procedure, and/or the Director may otherwise proceed to enforce the terms of this Order

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

The actions required by this Corrective Action Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Part 195, under any other order issued to Respondent under authority of 49 U.S.C. § 60101 et seq., or under any other provision of Federal or state law.

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.

William A Bate

JAN 11 2008

Jeffrey D. Wiese
Associate Administrator
for Pipeline Safety

Date Issued