



Pipeline and Hazardous Materials Safety Administration

MAY 2 6 2005

Richard A. Olsen Vice President Magellan Midstream Partners, L.P. Magellan Pipeline Company, L.L.C. One Williams Center Tulsa, Oklahoma 74172

RE: CPF No. 3-2005-5022H

Dear Mr. Olsen:

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 the Topeka to Kansas City Terminal line, including a pressure reduction on the entire line. 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.

Sincerely,

James Reynolds

Pipeline Compliance Registry
Office of Pipeline Safety

Enclosure

cc: Ivan Huntoon

Director, Central Region, OPS

VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND FACSIMILE

DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION OFFICE OF PIPELINE SAFETY WASHINGTON, DC 20590

In the Matter of

Magellan Midstream Partners, L.P.,
and
Magellan Pipeline Company, L.L.C.

Respondent.

CPF No. 3-2005-5022H

CORRECTIVE ACTION ORDER

Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Respondent to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure involving Respondent's Topeka, Kansas to Kansas City Terminal hazardous liquid pipeline.

At approximately 12:52 a.m. C.D.T. on Monday, May 23, 2005, a failure occurred on Respondent's Topeka to Kansas City Terminal (Topeka-KC Terminal) line in Wyandotte County, Kansas resulting in the release of gasoline. The cause of the failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Central Region, Office of Pipeline Safety (OPS) initiated an investigation of the incident.

Preliminary Findings

- At approximately 4:08 a.m. E.D.T. on May 23, 2005, Respondent reported to the National Response Center that a release of gasoline occurred at approximately 12:52 a.m. C.D.T. of approximately 450 barrels from its Topeka-KC Terminal pipeline.
- Respondent also reported that the released gasoline spewed from a casing vent and entered the storm drain system that discharges into the Missouri River. All cities downstream of the leak site, including Kansas City, Missouri, were notified of the leak. The Coast Guard indicated that they believed the impact to the river was not significant since there was no sheen or evidence of dead marine life along the river banks. However, as a result of the failure, there will be significant soil removal and environmental cleanup.

- Approximately 100 people from the Board of Public Utilities Power Plant were evacuated, and the power plant and four (4) businesses were shut down. The Union Pacific Railroad, located approximately 67 feet from the failure site, was shut down for an extended period of time. Typically 45 to 50 trains traverse this line daily.
- The failure occurred at Mile Post (MP) 9.44 between the 18th Street Junction in Kansas City, KS and the Kansas City Terminal in the Fairfax District of Kansas City, KS. No fires, injuries, or fatalities were reported in connection with the incident.
- Respondent's Topeka-KC Terminal line is approximately 102 miles long and transports refined products from Topeka, Kansas to the Kansas City Terminal. This hazardous liquid's pipeline is made up of the #6 10-inch line extending from Topeka to the 18th Street Junction, and the #4 8-inch line located entirely in Wyandotte County, Kansas, extending from the 18th Street Junction, east to the Kansas City Terminal.
- The failure site is located in a heavily industrialized area of Kansas City, Kansas known as the Fairfax District. The failure is located 2050 feet from the Missouri River. The Missouri River is the water supply for numerous downstream towns in Missouri. The failure site is in a high consequence area.
- Following the failure, the Topeka-KC Terminal line was shut down and booms were deployed near storm drain outlets. The mainline valve at 18th Street was immediately closed. Downstream valves were opened to facilitate drainage into the Kansas City Terminal Storage tanks.
- The cause of the failure has not yet been determined. The Topeka-KC Terminal line remains shut down. Respondent removed a six (6) foot long section of pipe containing the failure and ten (10) feet of casing, and is sending it to a metallurgical testing facility for analysis.
- The #4 8-inch line is approximately 3.28 miles long and was constructed in 1946. It is constructed of 8-inch nominal diameter, 0.219-inch wall thickness, grade B, electric resistance welded (ERW) pipe manufactured by Republic Steel. The #4 8-inch line has a coal-tar coating and has been cathodically protected by impressed current since 1989.
- The maximum operating pressure (MOP) of the #4 8-inch line is 1150 pounds per square inch (psig) as established by hydrostatic pressure testing in 1991. At the time of the failure, the actual operating pressure at the failure site was 1143 psig.
- On the #4 8-inch line, there are no known prior significant discharge events.
- Respondent inspected the #4 8-inch line in 2003 using two in-line inspection tools a deformation tool and a high resolution magnetic flux leakage (MFL) tool. No significant anomalies were found in the area of the failure site.

- The #6 10-inch line is approximately 98 miles long and was constructed in 1955. It is constructed of 10-inch nominal diameter, 0.203-inch wall thickness, X46 Grade, ERW pipe manufactured by Youngstown Steel. This line has a coal tar coating and has been cathodically protected by impressed current since 1955.
- Pre-1970 ERW pipe has a history of seam failure. OPS identified low-frequency ERW pipe to be subject to failures in the longitudinal seams because of manufacturing defects. On January 28, 1988 and March 3, 1989, OPS issued Alert Notices (ALN 88-01 and ALN 89-01) advising pipeline operators who have pipe manufactured by the ERW process of the problem.

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.

Section 60112, 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 result in likely 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.

Based upon the preliminary and additional findings, I continue to find that the operation of this pipeline without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the circumstances surrounding the May 23, 2005 failure, the uncertainty of the cause, the type and age of the pipe and the location of the failure in a high consequence area, I find that failure to expeditiously issue this Order would result in likely serious harm to life, property, and the environment.

Accordingly, this Order mandating needed 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 facsimile at (202) 366-4566. Any hearing will be held in Kansas City, MO or Washington, DC on a date that is mutually convenient to OPS and Respondent.

After receiving and analyzing additional data in the course of this investigation, OPS may identify other longer-term measures that need to be taken. Respondent will be notified of any

additional measures required and further amendment of the 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 Correction Action

Pursuant to 49 U.S.C. § 60112, I hereby Order and require Respondent to immediately take the following additional corrective actions with respect to Respondent's Magellan pipeline system:

- 1. Prior to resuming operations of the Topeka-KC Terminal line submit written start-up procedures, subject to the approval of the Director, Central Region, OPS. The procedures must provide for sufficient pressure monitoring, leak patrolling, and surveillance to ensure that no leaks are present when operation of the line is resumed.
- 2. Once the pipeline is restarted in accordance with Item 1, the in-service operating pressure along the Topeka-KC Terminal line shall be maintained at a 20 percent (20%) reduction. The operating pressure shall not exceed 80% of the operating pressure in effect immediately prior to the failure. Specifically, the operating pressure at the Topeka Station is not to exceed 782 psig. The pressure reduction shall remain in effect until written approval to return the pipeline to normal operating pressure is obtained from the Director, Central Region, OPS.
- 3. Conduct a detailed metallurgical analysis of the ruptured section pipe to determine the cause and contributing factors for the failure.
 - (A) Obtain prior approval of the metallurgical testing protocol from the Director, Central Region, OPS;
 - (B) Prior to commencing the metallurgical testing, provide the Director, Central Region, OPS with the scheduled date, time and location of the testing to allow an OPS representative to witness it; and
 - (C) Ensure that the laboratory distributes all resulting metallurgical reports, whether draft or final, to OPS at the same time as they are made available to Respondent.
- 4. Submit a written plan, with a proposed schedule for testing and repairs for prior approval by the Director, Central Region, OPS within 30 days of your receipt of this Order. The plan must verify the integrity of the Topeka-KC Terminal line. The plan must provide integrity testing that addresses all known or suspected factors in the failure, including if relevant:
 - (A) Hydrostatic pressure testing of the line, in accordance with the requirements set forth in §195.304, and/or other mitigative measures required to address the cause and contributing factors to the May 23, 2005 pipeline failure. The pressure testing must include a thirty (30) minute burst test. The burst test pressure shall be to a minimum of 139% of the maximum operating pressure at the high elevation in each test section.

- (B) Internal inspection tool surveys and remedial action. The type of internal inspection tools used must utilize the best technology available for providing information on the integrity of this segment and assessing the system based on the type of failure that occurred on May 23, 2005, with emphasis on identifying and evaluating the following:

 1) anomalies associated with dents, gouges and grooves; 2) metal loss due to corrosion;

 3) the orientation of the longitudinal seam of the pipe; 4) pipe deformation, 5) cracks, mill defects and stress corrosion cracking; and 6) long seam flaws that could lead to failure.
- (C) A detailed description of the inspection and repair criteria that will be used in the field evaluation of the anomalies that are excavated. This is to include a description of how any defects are to be graded and the schedule for repairs or replacement.
- (D) An evaluation of the line for areas of damaged or disbonded coating, including areas inside of cased crossings but not limited to, a close-interval, current interrupted, and pipe-to-soil potential surveys.
- (E) Integration of all available data from internal inspections, metallurgical analyses, and historical data, including repair and cathodic protection records.
- (F) A schedule and means for providing the results and data for testing programs performed to the Central Region.
- (G) Each element of the plan must be approved in advance by the Director, Central Region, OPS, who may provide approvals incrementally. Implement the plan as approved. The plan may be revised, as necessary, to incorporate new information obtained during the investigation and determinations concerning the cause of the failure. Revisions are subject to prior approval by the Director, Central Region, OPS.

Respondent may request approval from the Director, Central Region, OPS, to increase its operating pressure above the interim maximum operating pressure under Item 2, based on a showing that the hazard has been abated or that a higher pressure is justified based on an analysis showing that the pressure increase is safe considering all known defects, anomalies and operating parameters of the pipeline. The Director's determination will be based on cause of failure and provision of evidence that mitigative actions taken by the operator provide for the safe operation of the pipeline.

The Director, Central Region, OPS may grant an extension of time for compliance with any of the terms of this order for good cause. A request for an extension must be in writing.

The corrective actions required by this Corrective Action Order are in addition to and do not waive any requirements that apply to the pipeline under 49 C.F.R. Part 195, including the integrity management program regulations.

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 of not more than \$100,000 per day and in referral to the Attorney General for appropriate relief in the United States District Court.

Stacey L. Gerard

Associate Administrator for Pipeline Safety MAY 2 6 2005

Date Issued