



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

JUN 2005

Mr. Jerry Milhorn
Vice President of Operations
Kinder Morgan Energy Partners, L.P.
500 Dallas Street, Suite 1000
Houston, TX 77002

Re: CPF No. 4-2005-5021H

Dear Mr. Milhorn:

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 El Paso-Tucson 12-inch hazardous liquid pipeline. 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,

for
James Reynolds
Pipeline Compliance Registry
Office of Pipeline Safety

Enclosure

cc: R. M. Seeley, Director, Southwest Region, OPS

Mr. Edward A. Fant
500 Dallas, Suite 1000
Houston, TX 77002

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)	
Kinder Morgan Energy Partners, L.P.,)	CPF No. 4-2005-5021H
Respondent)	

CORRECTIVE ACTION ORDER

Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Kinder Morgan Energy Partners, L.P. (Respondent), to take necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure involving Respondent's El Paso-Tucson 12-inch hazardous liquid pipeline.

On May 28, 2005, a failure occurred on Respondent's El Paso-Tucson 12-inch hazardous liquid pipeline in El Paso, Texas. The cause of the failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Southwest Region, Office of Pipeline Safety (OPS) initiated an investigation of the accident.

Preliminary Findings

- On May 28, 2005, at approximately 11:30 AM EDT, Respondent's El Paso-Tucson 12-inch pipeline experienced a failure resulting in the release of an undetermined volume of gasoline.
- The failure site is located at or near Mile Post (MP) 13.7, Line Section 17, in Fort Bliss Military Reservation, El Paso, Texas. No fires, injuries, or fatalities were reported in connection with the accident. A portion of Highway 375 and a nearby railroad spur were temporarily shut down.
- Following the failure, Respondent shut-in the pipeline and initiated ground patrol to verify a leak had occurred. Respondent discovered a 25-square foot area saturated with gasoline at or near MP 13.7. Respondent sprayed ignition-retardant on the ground at the accident site to reduce the hazardousness of the spilled gasoline. The gasoline remaining in the line was removed by vacuum.

- Respondent's El Paso-Tucson 12-inch pipeline is approximately 303 miles in length and transports refined products from El Paso, Texas to Tucson, Arizona. Portions of the El Paso-Tucson pipeline cross interstate and state highways and are routed through or near populated areas, ecologically sensitive areas, and drinking water resources.
- The cause of the failure has not yet been determined. Preliminary visual examination at the failure site revealed a 2-foot split in the pipeline running diagonally from the 9 o'clock to the 12 o'clock position. Respondent cut out and replaced a 62-foot section of pipe containing the failure site. Respondent plans to transport the failed section of pipe to Exponent Failure Analysis Associates in California for metallurgical examination. OPS provided Respondent with Evidence Custody Control Procedures and forms to be used to ensure proper collection, cataloging, sealing, and transfer of the failed pipe section.
- Respondent's 12-inch El Paso-Tucson pipeline is constructed of 12-inch nominal diameter, X-52 Grade, 0.188-inch wall thickness, electric resistance welded pipe manufactured by U.S. Steel in 1964.
- The maximum operating pressure (MOP) of the El Paso-Tucson 12-inch pipeline within the segment containing the failure site is 1104 pounds per square inch gauge (psig) as established by hydrostatic testing prior to the pipe being commissioned for service. At the time of the failure, the pressure at the failure site was estimated to be 949 psig based on a discharge pressure of 1104 psig at El Paso Station.
- An internal inspection of the El Paso-Tucson 12-inch pipeline was performed in 1998.
- Respondent has returned the El Paso-Tucson 12-inch pipeline to service at 80% of the discharge pressure at the time of the failure. Respondent conducted a leak test and a strength test prior to returning the line to service.

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, 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 a 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 the continued operation of Respondent's El Paso-Tucson 12-inch hazardous liquid pipeline without corrective measures will be hazardous to life, property, and the environment. Additionally, after considering the age of

the pipe, the hazardousness of the product the pipeline transports, the pressure required for transporting the material, the proximity of the pipeline to populated areas, drinking water resources, ecologically sensitive areas, highways and railroads, and the ongoing investigation to determine the cause of the pipeline failure, I find that failure to expeditiously issue this Order requiring immediate corrective action would likely result in 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 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. The hearing will be held in Houston, Texas or Washington, DC on a date that is mutually convenient to OPS and the Respondent.

After receiving and analyzing additional data in the course of this investigation, OPS may identify other corrective action 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 it is consistent with safety considerations, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of additional corrective measures.

Required Corrective Action

Pursuant to 49 U.S.C. § 60112, I hereby order Kinder Morgan Energy Partners, L.P. to immediately take the following corrective actions with respect to its El Paso-Tucson 12-inch hazardous liquid pipeline:

1. The operating pressure on the El Paso-Tucson 12-inch pipeline is not to exceed 80 percent (80%) of the actual operating pressure in effect just prior to the May 28, 2005 failure. Specifically, the maximum discharge pressure is not to exceed 883 psig at El Paso and Deming Stations. 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, OPS. If the results of any action undertaken pursuant to this Order dictate a reduction in the allowable operating pressure below that imposed by this Order, Respondent must further reduce the operating pressure accordingly.
2. Conduct metallurgical testing of the failed pipe sections as follows:
 - (A) Obtain prior approval of the testing protocol, from the Director, Southwest Region, OPS;
 - (B) Prior to commencing the metallurgical testing, provide the Director, Southwest 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.
3. Within 30 days following receipt of this Order, re-evaluate the data from the 1998 internal inspection tool run, including information obtained from any resulting excavations. Conduct the re-evaluation as follows:
- (A) The re-evaluation must focus on the data from the tool most suitable for detecting the condition that was the precursor of the failure based on the findings of the metallurgical analysis;
 - (B) Determine whether the internal inspection data indicates any anomalies in the vicinity of the failure site that could have contributed to the failure;
 - (C) If any anomalies at the failure site are indicated by the data, describe the nature and magnitude of the anomalies and report why they were not repaired;
 - (D) Determine whether any other anomalies of a similar magnitude or nature are present elsewhere on any portion of the El Paso-Tucson 12-inch hazardous liquid pipeline;
 - (E) Make the in-line inspection data available to OPS or its representative; and
 - (F) Within 45 days of receipt of this Order, submit the results of the re-evaluation to the Director, Southwest Region, OPS.
4. Within 45 days of receipt of this Order, develop and submit a written plan with corrective measures for prior approval by the Director, Southwest Region, OPS. The plan must fully address all known or suspected factors that may have caused or contributed to the May 28, 2005 failure and must include:
- (A) The integration of the information developed from the actions required by Items 2 and 3, along with any relevant information from previous failure investigations, leak history, repair records, corrosion control records, in-line inspections, hydrostatic testing, activation of over pressure protection system, hydraulic analysis including surge and steady state evaluations, data from El Paso Station operator responses to abnormal operations, fatigue evaluation from pressure cycling due to normal and abnormal operating conditions including but not limited to low pressure shut downs, unscheduled pump shutdowns at pumping stations, changes in pressure cycling, and other relevant operating data for the purpose of performing a comprehensive analysis of all factors that caused or contributed to the failure on Line Section 17. If any of these evaluations, tests and inspections are not considered, justify the reason for not considering them;
 - (B) The performance of appropriate field testing, inspections, and evaluations, including consideration of additional internal inspections, to determine whether and to what extent the condition(s) associated with the failure, or other integrity threatening trends, are present along the remainder of the El Paso-Tucson 12-inch pipeline. Include a description of the tools and methods to be used in any field evaluations and the criteria

description of the tools and methods to be used in any field evaluations and the criteria to be used for the prioritization of any integrity threats that are identified. Make the results of any field evaluations available to OPS or its representative;

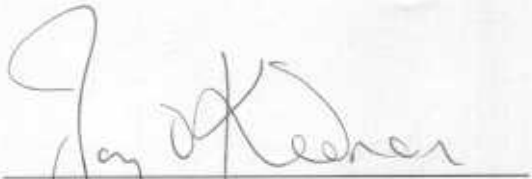
- (C) The performance of appropriate repairs or other corrective measures fully remediating the integrity threatening condition(s) associated with the failure everywhere along the pipeline where such conditions are identified by the evaluation process. Include a description of the repair method(s) to be used in undertaking any repairs or other remedial actions; and
 - (D) A proposed schedule for completion of the evaluation, testing and repairs.
5. Submit the plan to: Director, Southwest Region, Office of Pipeline Safety, 8701 South Gessner Street, Suite 1110, Houston, TX 77074. The plan must 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.
 6. Implement the plan as it is approved, including any revisions to the plan. Submit to the Director, Southwest Region, OPS a listing of the evaluations, tests, and inspections completed and their results.
 7. The Director, Southwest Region, OPS 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 pipeline to its pre-failure operating pressure is justified based on a reliable engineering analysis showing the pressure increase is safe considering all known defects, anomalies and operating parameters of the pipeline.

The Director, Southwest 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.

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

The corrective actions required by this Corrective Action Order are in addition to and do not waive any requirements that apply to Respondent's pipeline systems under 49 C.F.R. Part 195.

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 a United States District Court.



Stacey Gerard
Associate Administrator
for Pipeline Safety

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Date Issued