



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

Mr. Michael C. Morgan
President
Kinder Morgan Energy Partners, L.P.
500 Dallas Street, Suite 1000
Houston, TX 77002

MAY - 1 2004

Re: CPF No. 5-2004-5018H

Dear Mr. Morgan:

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, including a pressure reduction, with respect to your Concord-Sacramento 14-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: Mr. Jerry Milhorn, Vice President, Operations
Mr. Thomas A. Bannigan, President, Products Pipelines
Mr. Edward A. "Buzz" Fant

VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND TELECOPY

**DEPARTMENT OF TRANSPORTATION
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, DC 20590**

In the Matter of

Kinder Morgan Energy Partners, L.P.,

Respondent.

CPF No. 5-2004-5018H

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 the necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure involving Respondent's Concord-Sacramento 14-inch hazardous liquid pipeline.

On or about April 27, 2004, a failure occurred on Respondent's LS-25 Concord-Sacramento line in Solano County, CA resulting in the release of diesel fuel. The cause of the failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Western Region, Office of Pipeline Safety (OPS) initiated an investigation of the incident. The California State Fire Marshal, which, as an interstate agent for OPS, inspects the line for compliance with pipeline safety regulations, is participating in the investigation.

Preliminary Findings

- On or about April 27, 2004, Respondent's Concord-Sacramento line experienced a failure in Solano County, CA resulting in the release of an unknown quantity of diesel fuel in Suisun Marsh, south of Suisun City.
- Respondent detected a sudden pressure drop on its Concord-Sacramento line through its SCADA control system at approximately 6:27 P.M. PST on April 27, 2004. Respondent shut down the Concord-Sacramento line at approximately 6:33 P.M. PST. Respondent patrolled the right-of-way but was unable to identify the source of the pressure drop on April 27. Respondent resumed patrolling on April 28 and discovered a leak near Mile Post 15.1. Respondent reported the release to the National Response Center at 2:22 P.M. PST.

- No fires, injuries, or fatalities were reported in connection with the incident. Diesel fuel was released into wetlands in an area designated by pipeline safety regulations as unusually sensitive to environmental damage because of the existence of drinking water sources and endangered species.
- Respondent's Concord-Sacramento line transports refined petroleum products including diesel fuel, jet fuel, and gasoline. Its total length is approximately 61.2 miles. Portions of the pipeline cross highways and are routed through wildlife habitats, drinking water resources, populated areas and major bodies of water.
- Respondent contained the released product using booms that extend for approximately 600 feet in the marsh. Released product has been contained to an approximately 20-30 acre area within the booms. Respondent closed sluice gates to prevent the flow into the connected Suisun Slough waterway. Respondent has installed stopples to isolate the failed section and plans to evacuate the diesel fuel remaining in the line.
- The cause of the failure has not yet been determined. Respondent has not conducted an examination of the failure site at this time. Respondent plans to remove and transport the section of pipe containing the leak origin to a metallurgist for detailed analysis.
- The Concord-Sacramento line was installed in 1967 and is constructed of 14-inch nominal diameter, 0.219-inch wall thickness, X-52 grade, high-frequency electric resistance welded (ERW) pipe. It has a coal tar coating and is cathodically protected by impressed current.
- The original maximum operating pressure (MOP) of the Concord-Sacramento line was 1170 psig. Respondent reduced the MOP of the Concord-Sacramento line in 1997 to 950 psig. At the time of the failure, the pressure at the failure site is preliminarily estimated to have been 950 psig.
- Respondent performed internal inspections on the Concord-Sacramento line with magnetic flux leakage (MFL) and transverse flux (TFI) in-line inspection tools in 1999 and with MFL in-line inspection tools in 2001 and 2003. Respondent made two repairs in the area of the failure site in 2003 based on Respondent's analysis of the 2001 MFL in-line inspection data.
- Respondent plans to build a new pipeline to replace the current Concord-Sacramento line. Replacement is scheduled to start in the summer of 2004 and is expected to be complete by the end of 2004.
- On April 15, 2004, the Associate Administrator proposed to amend a corrective action order against Respondent in CPF No. 4-2003-5010H to add a requirement for public safety procedures to ensure that appropriate public officials in Arizona are kept aware of safety and environmental issues relating to the pipeline involved in that order. The proximity of the pipeline in this Order to population and environmentally sensitive areas indicates that public officials will have similar concerns as in the Arizona case.

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, provides 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.

After evaluating the foregoing preliminary findings of fact, I find that the continued operation of Respondent's Concord-Sacramento 14-inch hazardous liquid pipeline without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the age of the pipe, the proximity of the pipeline to unusually sensitive area drinking water and ecological resources and other populated areas, the combustible nature of the products the pipeline transports, the pressure required for transporting the material, and the ongoing investigation to determine the cause of the failure, I find that a 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 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 Lakewood, CO 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 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 Kinder Morgan Energy Partners, L.P. to immediately take the following corrective actions with respect to its Concord-Sacramento 14-inch hazardous liquid pipeline:

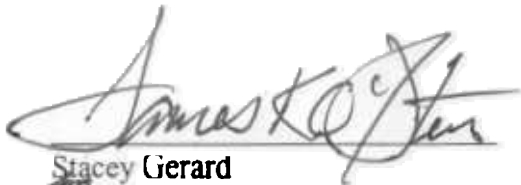
1. Prior to resuming operation of the Concord-Sacramento (LS-25) line, submit start-up procedures to the Director, Western Region, OPS for prior approval. This approval process may be done verbally, in which case Respondent shall provide subsequent written documentation that it initiated start-up of the line in accordance with its established procedures. The procedures must provide for sufficient pressure monitoring, surveillance to ensure that no leaks are present when operation of the line is resumed, and weekly patrolling of the right-of-way with the first patrol to occur immediately after resuming operation of the line.
2. After the pipeline is restarted, do not exceed 80 percent (80%) of the actual operating pressure in effect just prior to the April 27, 2004 failure. Specifically, the pressure is not to exceed 760 psig between the Concord origination point and the Sacramento discharge point. The reduced pressure at the leak site is not to exceed 80% of the determined pressure at the leak site at the time of the failure. If the ongoing investigation reveals that the operating pressure at the site of the release just prior to the failure was less than 950 psig, the Director, Western Region, may require the pressure reduction to be based on the lower actual operating pressure. 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, Western Region, OPS.
3. Conduct mechanical and metallurgical testing of the failed pipe sections as follows:
 - (A) Collect, catalog, and seal the pipe and all other evidence in the presence of OPS or an OPS representative and document the chain-of-custody;
 - (B) Obtain prior approval of the metallurgical testing laboratory to be used, as well as the testing protocol, from the Director, Western Region, OPS;
 - (C) Prior to commencing the metallurgical testing, provide the Director, Western Region, OPS with the scheduled date, time, and location of the testing to allow an OPS representative to witness it;
 - (D) 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. Re-evaluate the data from the MFL in-line inspection tool runs performed in 2001 and 2003 and the TFI inspection tool run in 1999, including information obtained from the resulting excavations, for the purpose of determining whether any anomalies were present that could have contributed to the failure and whether any other anomalies of a similar magnitude are present elsewhere on the pipeline. Make the 1999 TFI and 2001 and 2003 in-line inspection results available to OPS or its representative. Re-evaluation must occur within 30 days of receipt of this Order with respect to areas of the line that may affect a high consequence area, as defined by 49 C.F.R. § 195.450, and within 60 days of receipt of this Order with respect to the entire Concord-Sacramento line.
5. Within 30 days of receipt of this Order, develop and submit a written plan with corrective measures for prior approval by the Director, Western Region, OPS. The plan must fully address all known or suspected factors that caused or contributed to the April 27, 2004 failure and must include:

- (A) The integration of the information developed from the actions required by Items 3 and 4, along with any relevant information from previous failure investigations, leak history, repair records, corrosion control records, in-line inspections, hydrostatic testing, 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 April 27, 2004 failure;
 - (B) The performance of field testing, inspections, and evaluations, where appropriate, 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 affected segment;
 - (C) The performance of appropriate repairs or other corrective measures fully remediating the integrity threatening condition(s) associated with the failure everywhere along the affected segment 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;
 - (D) A proposed schedule for completion of the testing and repairs;
 - (E) A proposed schedule and method for weekly patrolling of the pipeline right-of-way; and
 - (F) A proposed method of limiting, to the greatest degree possible, the number of pressure cycles and the magnitude of pressure variances that the affected segment will be subjected to.
6. Submit the plan to: Director, Western Region, Office of Pipeline Safety, Golden Hills Center, Suite A-250, 12600 West Colfax Avenue, Lakewood, CO 80215-3736. 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.
 7. Implement the plan as it is approved, including any revisions to the plan.
 8. Identify any action or series of actions to be undertaken that may require rapid decision-making by the responsible authorities at the community level to protect the public safety such as through evacuations, road closings, or notifications of police, fire, or other emergency responders (such actions would include, but are not limited to, line restarts, pressure testing, purging, and significant excavation activities). Document your procedures for communicating timely notice of such actions to federal, state, and local officials and for maintaining liaison to coordinate pre-planned and actual response activities with the appropriate officials. Submit these items within 30 days to: Director, Western Region, Office of Pipeline Safety, Golden Hills Center, Suite A-250, 12600 West Colfax Avenue, Lakewood, CO 80215-3736.
 9. The Director, Western Region, OPS may allow the removal or modification of the pressure restriction set forth in Item 2 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 that the pressure increase is safe considering all known defects, anomalies and operating parameters of the pipeline.
 10. The Director, Western 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 United States District Court.



Stacey Gerard
Associate Administrator
for Pipeline Safety

MAY - 1 2004

Date Issued