

Pipeline and Hazardous Materials Safety Administration

JUN 30 2006

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

Mr. Robert O'Hair President Koch Pipeline Company, LP 4111 East 37th Street N. Wichita, KS 67220

Re: CPF No. 3-2006-5037H

Dear Mr. O'Hair:

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 on the Minnesota Pipe Line Company Lines 1 and 2 running from Clearbrook, Minnesota to Pine Bend, Minnesota, including a pressure reduction on Line 1. 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 A. 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	)
Koch Pipeline Company, LP,	)
Respondent.	)

CPF No. 3-2006-5037H

# **CORRECTIVE ACTION ORDER**

### Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Koch Pipeline Company, LP (Respondent) to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure involving the Minnesota Pipe Line Company Line 1.

On or about June 27, 2006, a failure occurred on Respondent's Line 1 in Morrison County, Minnesota resulting in the release of crude oil. The cause of the failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety (OPS) and the Minnesota Office of Pipeline Safety (MNOPS) initiated an investigation of the incident.

### **Preliminary Findings**

- At approximately 9:21 p.m. on June 27, 2006, Respondent's personnel detected a pressure and flow drop on Line 1 and immediately shut down the line. As a precaution, Respondent also shut down its Line 2 which runs parallel to Line 1.
- The failure site was identified at Mile Post (MP) 137 near the town of Little Falls, Minnesota. Respondent estimates that approximately 3200 barrels of crude oil were released. No fires, injuries, or fatalities were reported in connection with the incident.
- Respondent's Line 1 is approximately 256 miles long and transports crude oil from Clearbrook, Minnesota in a southeasterly direction to Pine Bend, Minnesota. The line is 16-inches in diameter. Portions of the line cross various highways and waterways. The

failure site is approximately 100 yards from State Highway 10 and the Burlington Northern railroad both of which were temporarily closed as a result of the incident. The Mississippi River is approximately 1.5 miles from the failure site.

- The cause of the failure has not yet been determined. Respondent and MNOPS conducted a preliminary visual examination at the failure site and reported that a 24-inch long longitudinal split was identified at approximately the one o'clock position on the pipe. Respondent and MNOPS also reported that several scratches or gouges were identified in the vicinity of the failure origin. Respondent removed the section of pipe containing the failure origin for transport to a metallurgist for detailed analysis. The line was returned to limited service at approximately 2:15 a.m. on June 29, 2006 at a reduced pressure.
- Respondent's Line 1 was installed in 1954-1955. Portions of Line 1 are constructed of 0.250-inch wall thickness grade X-52 pipe and portions are constructed of 0.281-inch wall thickness grade X-52 pipe. Line 1 contains both seamless and electric resistance welded (ERW) pipe. It has a coal tar coating and is cathodically protected by impressed current. The pipe that failed is 0.281-inch seamless pipe. Line 2 was installed between 1962 and 1985 in looped segments. The segment of Line 2 at the failure site was installed in 1985. Portions of Line 2 are constructed of 0.280-inch wall thickness grade X-52 ERW pipe and portions are constructed of 0.281-inch wall thickness grade X-52 ERW pipe. It has a tape coating and is cathodically protected by impressed current. Line 2 lies approximately 15 feet from Line 1 but is one foot deeper. Line 1 and Line 2 operate in common through shared headers at the pump stations.
- The maximum operating pressure (MOP) of Line 1 is 1170 pounds per square inch gauge (psig) as established by hydrostatic testing. At the time of the failure, the operating pressure was 1157 psig at the outlet of the upstream pump station (Little Falls) and approximately 883 psig at the failure site.
- The pipeline was internally inspected in 1997-1998 and in 2002-2003 with a geometry tool and a high-resolution magnetic flux leakage tool. Respondent reported that no anomalies greater that 10 percent were identified in the vicinity of the failure site.
- The pipeline was hydrostatically tested in 1999. The hydrostatic test resulted in seven failures, one of which was attributed to a check valve, three seam failures due to hook cracks, one faulty relief on a mainline block valve, one cracked girth weld, and one gasket failure on a stopple fitting.
- The pipeline experienced a significant spill incident on December 28, 1988 when a seam failure resulted in the release of approximately 18,390 barrels of crude oil.

#### 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 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 Lines 1 and 2 without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the age of the pipe, its leak history, the proximity of portions of the pipelines to highways and waterways, the nature of the product the pipelines transport, the pressure required for transporting the product, 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 facsimile at (202) 366-4566. The hearing will be held in Kansas City, Missouri 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.

#### **<u>Required Corrective Action</u>**

Pursuant to 49 U.S.C. § 60112, I hereby order Koch Pipeline Company, LP to immediately take the following corrective actions with respect to its Lines 1 and 2:

- 1. The operating pressure on Line 1 is not to exceed 80 percent of the operating pressure in effect immediately prior to the June 27, 2006 failure. Specifically, the operating pressure at the Little Falls pump station is not to exceed 926 psig and the operating pressure at the failure site is not to exceed 706 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, Central 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 testing and failure analysis of the failed pipe section as follows:

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

(B) Obtain prior approval of the metallurgical testing protocol from the Director, Central Region, OPS;

(C) 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

(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.

- 3. Re-evaluate the data from the 1997-1998 and 2002-2003 internal inspections for Lines 1 and 2, including information obtained from any resulting excavations/repairs, for the purpose of determining whether any anomalies that could have contributed to the June 27, 2006 failure, including anomalies associated with dents, gouges, grooves, pipe deformations, longitudinal cracks, mill defects, and stress corrosion cracking were present, and whether any anomalies with similar characteristics are present along the remainder of the pipelines. Extract and record dimensional data of all such anomalies, including data on distance from upstream and downstream girth weld, o'clock position, minimum and maximum remaining wall thickness, anomaly growth between internal inspections, and any remedial actions taken for each anomaly. Make these internal inspection results available to OPS or its representative.
- 4. Within 30 days of receipt of this Order, develop and submit a written plan with corrective measures for prior approval by the Director, Central Region, OPS. The plan must fully address all known or suspected factors that caused or contributed to the failure and must include, as applicable:

(A) The integration of the information developed from the actions required by Items 2 and 3 with any relevant information from previous failure investigations, leak history,

repair records, corrosion control/cathodic protection records, in-line inspections, hydrostatic testing, changes in pressure cycling, 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 appropriate field testing, inspections, and evaluations, including consideration of running internal inspection tools on Lines 1 and 2 to determine whether and to what extent the conditions associated with the failure, or any other integrity threatening conditions, are present along the remainder of the pipelines. Provide 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 OPS or its representative;

(C) The performance of appropriate repairs or other corrective measures fully remediating the condition(s) associated with the failure everywhere along Lines 1 and 2 where such conditions, or any other integrity threatening 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; and

(D) A proposed schedule for completion of the testing, evaluation, and repairs required by paragraphs (A)-(C).

- 5. Submit the plan to: Director, Central Region, Office of Pipeline Safety, 901 Locust Street, Suite 462, Kansas City, MO 64106-2641. 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.
- 7. Submit quarterly reports to the Director, Central Region, OPS that: (1) include the 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.
- 8. The Director, Central 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 that the pressure increase is safe considering all known defects, anomalies and operating parameters 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 any other order issued to Respondent under authority of 49 U.S.C. chapter 601, under 49 C.F.R. Part 195, or under 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 administrative civil penalties of up to \$100,000 per violation per day pursuant to 49 U.S.C. 60122, and in referral to the Attorney General for imposition of civil judicial penalties or other appropriate relief in United States District Court pursuant to 49 U.S.C. 60120.

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Associate Administrator for Pipeline Safety

JUN 30 2006

Date Issued