



Research and Special Programs Administration

APR 10 133

Mr. Steve Barham
President, Transportation
ConocoPhillips Pipe Line Company
600 North Dairy Ashford, TA 2010
Houston, Texas 77079

Re: CPF No. 4-2003-5009H

Dear Mr. Barham

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 the 12-inch segment of your Wood River Product Pipeline running from the Ponca City Pump Station in Kay County, Oklahoma to the Glenpool Pump Station in Tulsa County, Oklahoma. Service is being made by certified mail and facsimile. Your receipt of this 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,

Gwendolyn M. Hill

Pipeline Compliance Registry Office of Pipeline Safety

**Enclosure** 

cc:

Mr. Dave Ysebaert

General Manager, Pipelines and Terminals

VIA CERTIFIED MAIL (RETURN RECEIPT REOUESTED) AND TELECOPY

# DEPARTMENT OF TRANSPORTATION RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION WASHINGTON, DC 20590

In the Matter of	)	
	)	
ConocoPhillips	)	CPF No. 4-2003-5009H
Pipe Line Company,	)	
Respondent.	)	

#### CORRECTIVE ACTION ORDER

#### Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require ConocoPhillips Pipe Line Company (Respondent) to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure on the 12-inch segment of Respondent's Wood River Product Pipeline extending from the Ponca City Pump Station in Kay County, Oklahoma to the Glenpool Pump Station in Tulsa County, Oklahoma ("the affected segment").

On April 1, 2003, a failure occurred on Respondent's Wood River Product Pipeline approximately 15 miles southeast of Ponca City, OK. 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 incident.

#### Preliminary Findings

- At approximately 3:55 P.M. CST on April 1, 2003, the Wood River Product Pipeline ruptured in Osage County, OK. The rupture resulted in the release of approximately 1000 barrels of diesel fuel.
- The failure occurred near Mile Post (MP) 19.5 on unpopulated grassy pasture about 15 miles southeast of Ponca City, OK. Some of the fuel discharged into a tributary of Doga Creek approximately 4.5 miles from the Arkansas River, where it was controlled by erecting cofferdams.
- No fires, injuries, fatalities, evacuations, or road closures were reported.

- The Wood River Product Pipeline transports refined petroleum products, including diesel fuel and other hazardous liquids across state lines.
- Portions of the Wood River Product Pipeline are routed near highly populated areas, intersect state and interstate highways, and environmentally sensitive areas.
- The Wood River Product Pipeline originates at the Ponca City Pump Station in Kay County, OK and extends approximately 500 miles, terminating at the Wood River terminal in Madison County, IL.
- The affected segment of the Wood River Product Pipeline originates at the Ponca City Pump Station located near Respondent's refinery in Ponca City, Kay County, OK and terminates approximately 86 miles southeast at the Glenpool Pump Station southwest of Tulsa, Tulsa County, OK, where refined product flows either to the Glenpool South Tank Farm or continues downstream to the Wood River, IL terminal.
- Following the failure, Respondent isolated the failed section of the 12-inch segment by closing the upstream and downstream block valves closest to the failure site, at MP-3 and MP-28.2, respectively.
- The preliminary investigation indicates that the failure may have originated in the longitudinal weld seam. The cause of the failure has not yet been determined. Respondent plans to transport the section of pipe containing the fracture origin to a metallurgist for detailed analysis.
- The affected segment of the Wood River Product Pipeline was installed in 1958 and is constructed of 12-inch nominal diameter, varying wall thickness (wt) and yield strength (0.375 wt, grade X-46; 0.281 wt, grade X-46; 0.281 wt, grade X-52; 0.250 wt, grade X-46; and 0.250 wt, grade X-52), low-frequency electric resistance welded (ERW) pipe. The manufacturer is unknown.
- The affected segment of the Wood River Product Pipeline is cathodically protected by impressed current and is coated with coal-tar enamel.
- The maximum operating pressure (MOP) of the affected segment is 1566 psig, with high-discharge control set at 1535 psig. At the time of the failure, the operating pressure at the site of the release was 1260 psig.
- The MOP for the affected segment was established by hydrostatic test conducted in 1983.
- There is no record that Respondent has conducted In Line Inspections (ILIs) on the affected segment.

- OPS issued Alert Notices on January 28, 1988 and March 8, 1989 informing pipeline operators that low-frequency ERW pipe, such as the pipe used to construct the affected segment of the Wood River Product Pipeline, is subject to longitudinal weld seam failures caused by the presence of manufacturing defects in the ERW seams that can grow over time. These Alert Notices further advised operators that seam corrosion and cyclic fatigue had been found to have contributed to the growth of these defects and in some cases, operational failures had occurred many months or years after successful hydrostatic testing was conducted.
- Respondent is headquartered in Houston, Texas and operates throughout the United States and in 49 countries. Respondent is a corporation formed through the merger of Conoco, Inc. and Phillips Petroleum Company.

## 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, 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 the Wood River Product Pipeline without corrective measures would be hazardous to life, property, and the environment. Additionally, after considering the age of the pipe and method of manufacturing, the proximity of portions of the pipeline to populated areas, the line's proximity to public highways, surrounding high consequence areas, the highly combustible nature of the product the pipeline transports, the pressure required for transporting the material, and the lack of a determination as to 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, and the environment.

Accordingly, this Corrective Action 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 telecopy 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 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 the Respondent, ConocoPhillips Pipe Line Company, to immediately take the following corrective actions with respect to the segment of its Wood River Product Pipeline extending from the Ponca City Pump Station in Kay County, Oklahoma to the Glenpool Pump Station in Tulsa County, Oklahoma:

- 1. Maintain a minimum 20 percent (20%) reduction in the in-service operating pressure on the 12-inch segment of its Wood River Product Pipeline from the Ponca City Pump Station to the Glenpool Pump Station. The operating pressure shall not exceed 80 percent of the operating pressure in effect immediately prior to the failure. Specifically, the operating pressure is not to exceed 1008 psig at the point of failure. This pressure restriction shall remain in effect until written approval to return the pipeline to normal operating pressure is obtained from the Director, Southwest Region, OPS.
- 2. Determine the cause of the failure and identify any contributing factors by conducting detailed metallurgical testing and failure analysis of the ruptured section of pipe. In addition to failure analysis, the metallurgical testing must include an evaluation of the failed pipe section for the presence of corrosion, stress corrosion cracking, or any other condition that could affect the long-term integrity of the pipeline. Provide the Director, Southwest Region, OPS with at least 7 days advance notice of the date scheduled for this testing, which OPS may elect to witness, and submit the testing protocol to the Director, Southwest Region, OPS for approval as soon as it is developed. Submit all metallurgical analysis reports to the Director, Southwest Region, OPS within 7 days of receiving them.
- 3. Submit a written plan for remedial action, with a proposed schedule for testing and repairs, for prior approval by the Director, Southwest Region, OPS within 30 days of your receipt of this Order. The plan must provide for the integration of all available operational data and the evaluation and remediation of all known or suspected factors contributing to the April 1, 2003 failure. The plan must describe the inspection and repair criteria that will be used in the process. The plan must be updated as necessary to incorporate the results of the testing and analysis required in Item 2 as those results become available.
- 4. The plan must consider the use of an ILI tool, hydrostatic testing, or other appropriate testing methods, for the purpose of evaluating the overall integrity of the affected segment. Submit summary reports on the results of any such testing to the Director, Southwest Region, OPS. Summary reports must include information on the nature of any anomalies encountered anomaly location, and proposed method of remediation.

- 5. Each element of the plan and its scheduling must be approved in advance by the Director, Southwest Region, OPS, who may provide the approvals incrementally. 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 approval by the Director, Southwest Region, OPS. The plan must be fully implemented, as each element is approved, according to the set schedule.
- 6. Integrate and evaluate all operational data from the entire Wood River Product Pipeline running from the Ponca City Pump Station to the Wood River, IL terminal for the purpose of determining whether the conditions or factors which caused or contributed to the April 1, 2003 failure exist on any other portions of the Wood River Product Pipeline. Submit the results of this evaluation to the Director, Southwest Region, OPS within 60 days of receipt of this Order. If this evaluation identifies any such conditions in any other portion of the pipeline, the submission must also include a remedial plan, with a schedule, for prior approval by the Director, Southwest Region, OPS setting forth the proposed actions needed to remedy the concerns and ensure the integrity of the pipeline.
- 7. If approval of the Director, Southwest Region, OPS, is requested to remove or modify the pressure restriction set forth in Item 1 of this Corrective Action Order, Respondent must submit written information demonstrating that the hazard has been abated and that restoring the pipeline to its pre-failure operating 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, 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 procedures for the issuance of this Order are described in Part 190, Title 49, Code of Federal Regulations, § 190.233, a copy of which is enclosed, is made part of this Order, and describes the Respondent's procedural rights relative to this Order.

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 dministrator for Pipeline Safety

APR 1 0 2003

Date Issued