



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

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

MAR 29 2006

RECEIVED APR 3 2006

Mr. Jim Lamanna  
President  
BP Pipelines (North America), Inc.  
28100 Torch Parkway  
Warrenville, IL 60555

Re: CPF No. 3-2006-5033H

Dear Mr. Lamanna:

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 Toledo/West Toledo hazardous liquid pipeline, including successfully performing hydrostatic testing, before resuming operations. 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

Enclosure

cc: Ivan Huntoon  
Director, Central Region, PHMSA

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

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In the Matter of )  
)

BP Pipelines (North America), Inc., )

CPF No. 3-2006-5033H

Respondent )  
\_\_\_\_\_)

**CORRECTIVE ACTION ORDER**

**Purpose and Background**

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require BP Pipelines (North America), Inc. (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 Toledo/West Toledo hazardous liquid pipeline.

On March 23, 2006, Respondent discovered a leak on its 6-inch Toledo/West Toledo pipeline in Toledo, Ohio. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA) initiated an investigation of the accident.

**Preliminary Findings**

- On March 23, 2006, at approximately 3:00 AM CST, Respondent's personnel at its Tulsa, Oklahoma control center detected a reduction in pressure and flow on the Toledo/West Toledo pipeline. At 6:11 AM CST, Respondent reported the pipeline failure to the National Response Center (NRC) (Incident Report No. 791693).
- The failure resulted in a release currently estimated at 200 barrels of unleaded gasoline from the pipeline. Respondent determined the location of the failure site to be at or near Mile Post 6.7 near the intersection of Laskey and Tractor Roads on the west side of the city of Toledo, Ohio. Some of the gasoline migrated via drain tile into the Shantee Creek which flows to Lake Erie. Potential impacts to ground-water and the environment are not yet known. No fires, injuries, or fatalities were reported in connection with the accident.
- Following the failure, Respondent shut down the pumps and closed the remote valve at the Toledo Refinery and ceased operating the pipeline. Respondent's personnel further isolated the failed pipe section by manually closing the main-line valves at Mile Posts

4.66, 7.08, and 8.33. Respondent also activated its spill response plan and set up containment booms along Shantee Creek.

- The cause of the failure has not yet been determined. Respondent's personnel conducted a preliminary visual examination at the failure site and identified a narrow, straight, longitudinal split approximately 22-inches in length at the three o'clock position on the pipe. Respondent has removed the pipe joint containing the failure origin for transport to a metallurgist for in-depth analysis.
- The Toledo/West Toledo pipeline is approximately 14.3 miles long and transports refined petroleum products from the Toledo Refinery to the West Toledo Terminal in Lucas County, Ohio. The pipeline runs through populated areas and is in close proximity to roads and railroads. The entire length of the pipeline is located in a high-consequence area as defined in 49 C.F.R. § 195.450.
- Respondent's records indicate that the pipeline was installed in 1951 and is constructed of 6.625-inch diameter, 0.250-inch wall thickness, grade X-42 seamless pipe. It has a coal-tar coating and is cathodically protected by impressed current. It is not yet known whether the entire pipeline is seamless, or if portions of the line have welded seams, but the type of failure is characteristic of pipe with a longitudinal seam. PHMSA has issued advisory bulletins concerning the susceptibility of pre-1970 electric-resistance welded (ERW) pipe to seam failures.
- The maximum operating pressure (MOP) of the pipeline is 700 pounds per square-inch gauge (psig). The actual operating pressure at the failure site at the time of the failure is estimated to have been 350 psig.
- The pipeline was internally inspected in 1996 and 2002 using both metal loss and geometry tools. The 2002 inspection resulted in four immediate repairs which were completed by January 2003 and involved pipe sleeving and/or coating. None of these repairs were performed at the failure site. A corrosion anomaly of 26% was identified in proximity to the failure site but was determined by Respondent to be within acceptable limits for continued safe operation.
- During the investigation of this release, another leak was identified at an above-ground crossing located at Bennett Road on March 24, 2006. This leak appeared to be minor seepage through the pipe wall associated with external corrosion under the coating and was also reported to the NRC.

#### **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, when PHMSA determines that operation of a pipeline facility is or would be hazardous. The basis for determining 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 of Title 49, United States Code, 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 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, and considering the age of the pipe, the hazardous nature of the product the pipeline transports, the spill volume, the proximity of the pipeline to populated areas, the proximity of the pipeline to waterways and environmentally sensitive areas, and the ongoing investigation to determine the cause of the failure, I find that the continued operation of Respondent's Toledo/West Toledo hazardous liquid pipeline without corrective measures would be hazardous to life, property, or the environment. I further find that failure to expeditiously issue this Order requiring immediate corrective action will 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 Kansas City, Missouri or Washington, D.C. on a date that is mutually convenient to PHMSA and the Respondent.

After receiving and analyzing additional data in the course of this investigation, PHMSA 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 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 BP Pipelines (North America), Inc. to immediately take the following corrective actions with respect to its Toledo/West Toledo hazardous liquid pipeline:

1. Prior to resuming operation of the pipeline:

- (A) Develop and submit a written plan for prior approval of the Director, Central Region, PHMSA, to conduct a short-duration hydrostatic test to a minimum pressure of 100% of SMYS or 1.39 X MOP, followed by a 49 C.F.R. Subpart E hydrostatic test. Provide the Regional Director with the date and time of the testing which PHMSA may elect to witness. Conduct the hydrostatic testing as appropriate to the

condition(s) causing the March 23, 2006 failure, including metallurgical analysis of any failures that occur during the testing; and

(B) Obtain written approval prior to resuming operation from the Director, Central Region, PHMSA. The Regional Director's determination will be based on whether all corrective actions required by this Order necessary to ensure the safe and environmentally sound operation of the pipeline have been completed.

2. Conduct metallurgical testing 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 laboratory to be used, as well as the testing protocol, from the Director, Central Region, PHMSA;

(C) Prior to commencing the metallurgical testing, provide the Director, Central Region, PHMSA with the scheduled date, time, and location of the testing to allow a PHMSA representative to witness it; and

(D) Ensure that the laboratory distributes all resulting metallurgical reports, whether draft or final, to PHMSA at the same time as they are made available to Respondent.

3. Re-evaluate the data from the metal loss internal inspection tool and the geometry tool runs performed in 1996 and 2002, including information obtained from the resulting excavations/repairs, for the purpose of determining whether any anomalies that could have contributed to the failures at Mile Post 6.7 and Bennett Street crossing were present, and whether any anomalies with similar characteristics are present along the remainder of the pipeline. 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 PHMSA or its representative.

4. Provide PHMSA with the technical justifications documenting the basis for the integrity management program re-assessment interval established for the pipeline pursuant to 49 C.F.R. § 195.452(j)(3).

5. 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, PHMSA. The plan must fully address all known or suspected factors that caused or contributed to the March 23, 2006 failure and the corrosion leak identified on March 24, 2006 and must include:

(A) The identification of the type of pipe, whether seamless or seamed, by mile post along the entire length of the pipeline along with the integration of the information

developed from the actions required by Items 1-3 with any relevant information from records of previous failure investigations, leak history, repair activity, corrosion control/cathodic protection activity, in-line inspections, hydrostatic testing, changes in pressure cycling, and other relevant operating records 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 running a high-resolution internal inspection tool if necessary, to determine whether and to what extent the condition(s) associated with the failure including cracks, metal loss due to internal, external, or atmospheric corrosion, or any other integrity threatening conditions, are present along the remainder of the pipeline. Include a survey of all below- to above-ground transition areas like the Bennett Street crossing. Provide a detailed description of the criteria to be used for the field evaluation(s) and prioritization of any integrity threats/anomalies that are identified. Make the results of any internal inspections, field excavations, and evaluations available to PHMSA or its representative;

(C) The performance of appropriate repairs or other corrective measures fully remediating all integrity threatening anomalies and condition(s) everywhere along the pipeline where such 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

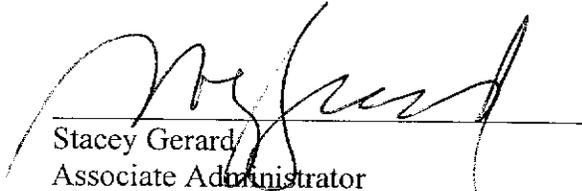
(D) A proposed schedule for completion of the testing, evaluation, and repairs required by paragraphs (A)-(C).

6. Submit all plans and materials to: Director, Central Region, Pipeline and Hazardous Materials Safety Administration, 901 Locust Street, Suite 462, Kansas City, MO 64106-2641. The plans must be revised as necessary to incorporate new information obtained during the failure investigation, testing, 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 plans as they are approved, including any plan revisions.
8. Submit reports to the Director, Central Region, PHMSA, on at least a quarterly basis that include the available data and results of the testing and evaluations required by this Order and describe the progress of the repairs or other remedial actions being undertaken.

The Director, Central Region, PHMSA 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, Central Region, PHMSA, to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator are final.

In accordance with 49 U.S.C. § 60122 and 49 C.F.R. § 190.223, 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.



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Stacey Gerard  
Associate Administrator  
for Pipeline Safety

MAR 29 2006

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Date Issued