

**AUG 26 2010**

***VIA FEDERAL EXPRESS AND FACSIMILE TO: 630-836-3588***

Steve Pankhurst  
President  
BP Pipelines (North America), Inc.  
21800 Torch Parkway  
Warrenville, IL 60555

**Re: CPF No. 3-2010-5010H**

Dear Mr. Pankhurst:

Enclosed please find a Corrective Action Order issued in the above-referenced case. It requires BP Pipelines (North America), Inc., to take certain corrective measures with respect to the 38-mile-long pipeline operated by the company that recently failed in Hammond, Indiana. Service of this Order by electronic transmission is effective upon transmission, in accordance with 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

Enclosures: Corrective Action Order  
Copy of 49 C.F.R. § 190.233

cc: Mr. David Barrett, Director, Central Region, PHMSA

**U.S. DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
OFFICE OF PIPELINE SAFETY  
WASHINGTON, DC 20590**

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<b>In the Matter of</b>	)	
	)	
<b>BP Pipelines (North America), Inc.,</b>	)	<b>CPF No. 3-2010-5010H</b>
	)	
<b>Respondent.</b>	)	
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**CORRECTIVE ACTION ORDER**

**Background and Purpose**

On August 17, 2010, at 2:58 p.m. Central Standard Time (CST), BP Pipelines (North America), Inc. (BP or Respondent) notified the National Response Center (NRC) (NRC Report #951259) of an incident that had occurred in Hammond, Indiana. Specifically, BP informed the NRC that it had found petroleum product in a storm sewer at the corner of 175<sup>th</sup> Street and White Oak Avenue, and that the company operated a pipeline near that location.

On August 19, 2010, at 5:12 p.m. CST, BP provided the NRC (NRC Report #951504) with an update to its initial incident report. In particular, BP informed the NRC that one of its pipelines had failed at the previously-described location, resulting in the release of approximately 90 barrels of gasoline and diesel fuel into a storm sewer. BP also stated that it had evacuated one residence in the area and initiated an onsite investigation to identify the cause of the failure.

After receiving notice of these NRC reports, the Pipeline and Hazardous Materials Administration (PHMSA), Office of Pipeline Safety (OPS), Central Region initiated an accident investigation that is still ongoing. To date, the investigation has included a review of relevant records on file with OPS, a physical inspection of the failure site, interviews with BP employees, and consultations with other federal, state, and local officials.

I have reviewed the results of that preliminary investigation and find that continued operation of this pipeline is or would be hazardous to life, property, or the environment. Accordingly, I am issuing this Corrective Action Order (CAO) pursuant to my authority under 49 U.S.C. § 60112 and 49 C.F.R. § 190.233 for the pipeline facilities described more fully below. I further find that a failure to issue the CAO expeditiously would result in likely serious harm to life, property, and the environment. Therefore, I am waiving the requirement for prior notice and an opportunity for a hearing.

## **Preliminary Findings**

- BP is the owner or operator of a 38-mile-long pipeline that transports refined petroleum products through 10-inch and 12-inch pipe from the White Oak Pump Station in Lake County, Indiana, Milepost (MP) 0, to the Manhattan Pump Station in Will County, Illinois, MP 38 (Affected Pipeline Facility).
- On August 17, 2010, at 2:58 p.m. CST, BP notified the NRC that it had found petroleum product in a storm sewer at the corner of 175<sup>th</sup> Street and White Oak Avenue in Hammond, Indiana. BP also informed the NRC that the Affected Pipeline Facility was located in the vicinity of the release site.
- The intersection of 175th Street and White Oak Avenue in Hammond, Indiana, is in a “high consequence area” under 49 C.F.R. §§ 195.450 and 195.452, and is within approximately one to two blocks of an interstate highway.
- On August 19, 2010, at 5:12 p.m. CST, BP notified the NRC that the Affected Pipeline Facility had failed at the above location, resulting in the release of approximately 90 barrels of gasoline and diesel fuel into the sewer system.
- Based on the initial results of its accident investigation, BP has concluded that a field bend in the Affected Pipeline Facility failed at MP 7.27. That field bend was encased in concrete and had visible signs of external corrosion on the inside radius of the pipe at the 3 o’clock position.
- BP has removed the field bend that failed at MP 7.27 and an adjacent field bend and sent both to a laboratory in Ohio for metallurgical analysis.
- BP has replaced the two field bends removed for metallurgical analysis with new, pre-tested field bends.
- Information available to OPS indicates that the segment of the Affected Pipeline Facility that experienced the failure was originally installed with a concrete encasement in 1928, that it has never been subjected to a hydrostatic pressure test, and that its maximum operating pressure (MOP) at the time of the failure was 781 psi.
- Information available to OPS indicates that the most recent inline inspection of the segment of the Affected Pipeline Facility that experienced the failure occurred in 2010, with no abnormalities detected or reported.
- Information available to OPS indicates that there are approximately 20 concrete-encased field bends in the Affected Pipeline Facility, the conditions of which are not fully known at this time.

- Information available to OPS indicates that as of August 23, 2010, BP had removed approximately 192 barrels of petroleum product from the failure site.
- Information available to OPS indicates that a significant amount of soil must be removed to fully remediate the site of the failure.

### **Determination of Necessity for Corrective Action Order and Right to Hearing**

The bases for determining whether a pipeline facility requires corrective action are specified in 49 U.S.C. § 60112 and 49 C.F.R. § 190.233. Under those provisions, the Associate Administrator may issue a CAO if he finds, after reasonable notice and the opportunity for a hearing, a particular pipeline facility to be hazardous to life, property, or the environment. The terms of that Order may include the suspended or restricted use of that pipeline facility, physical inspection, testing, repair, replacement, or any other action as appropriate. The Associate Administrator may also issue a CAO without notice and the opportunity for a hearing, if he finds that a failure to do so expeditiously will result in likely serious harm to life, property or the environment. In such cases, the opportunity for a hearing will be provided as soon as practicable after the issuance of the CAO.

After considering the preliminary findings of fact and applicable criteria set forth above, I find that continued operation of the Affected Pipeline Facility without corrective measures would be hazardous to life, property and the environment. That finding is supported by the age of the pipe and circumstances of the failure, including the fact that an 81-year-old, concrete-encased field bend with visible signs of external corrosion failed not long after the performance of an inline inspection that detected no abnormalities or defects, and the existence of other field bends with similar characteristics in the Affected Pipeline Facility, the conditions of which are not fully known at this time; the proximity of the Affected Pipeline Facility, including the segment that failed, to a high consequence area and interstate highway; the characteristics of the soil and other climatic and geologic conditions in that location; the hazardous nature of the product transported and the pressure required for that transportation; and the significant uncertainties as to the cause of the failure and ongoing status of the investigation.

I further find that a failure to issue a CAO expeditiously would result in likely serious harm to life, property, and the environment. That finding is supported by the advanced age of the pipe used to construct the Affected Pipeline Facility; the presence of other field bends with concrete encasements, the conditions of which are not fully known at this time; and the uncertainty surrounding the causes of the failure. Accordingly, this CAO is issued without prior notice and opportunity for a hearing, and its terms and conditions are effective upon receipt.

Within 10 days of receiving this CAO, Respondent may request a hearing 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 as soon as practicable, on a date that is mutually convenient to PHMSA and Respondent, in Kansas City, MO, or Washington, DC.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. Respondent will be notified of any additional measures required and amendment of this Order CAO be considered. To the extent consistent with public 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 BP to take the following corrective actions with respect to the Affected Pipeline Facility:

1. Immediately cease all transportation of hazardous liquids through the Affected Pipeline Facility.
2. Before transporting any hazardous liquids through the Affected Pipeline Facility, submit a written restart plan to the Director, Central Region, PHMSA, for approval. The terms of that restart plan must include provisions for:
  - A. Performing a hydrostatic pressure test of the appropriate portions of the Affected Pipeline Facility, including from MP 0 to the Little Calumet River Block Valve (approximately MP 8.3), and providing the Director with an analysis of the results of that test or tests;
  - B. Reducing the MOP of the Affected Pipeline Facility to 80 percent of the highest operating pressure experienced at the White Oak Station (MP 0) and Crete Station (MP 19.95) in the 60 days prior to August 17, 2010;
  - C. Performing inspections of the right-of-way for the Affected Pipeline Facility at least two times per week;
  - D. Taking whatever other actions may be necessary to ensure that the Affected Pipeline Facility is not hazardous to life, property and the environment.
3. Within 45 days, complete a metallurgical examination of the failed specimen, and the other field bend already removed from service. Submit for approval a protocol for performing that mechanical and metallurgical testing.
4. Within 60 days following receipt of this CAO, submit an integrity verification and remedial work plan to the Regional Director for approval. The plan must provide for the verification of the integrity of the pipeline and must address all factors known or suspected in the August 17, 2010 failure. The plan must:
  - A. Integrate the results of the metallurgical analysis performed pursuant to Item 3 with all relevant operating data in analyzing the August 17, 2010 failure;
  - B. Review the available leak and failure history of the Affected Pipeline Facility and develop a written report containing all available information on the locations,

dates, and cause of leaks and failures and describing BP's plans to confirm that the remainder of the pipeline is not susceptible to any such leaks or failures. Make that report available to the Director.

- C. Evaluate the remainder of Affected Pipeline Facility to determine whether the condition(s) involved in the August 17, 2010 failure, or any other integrity threatening condition(s), are present. The evaluation methods used must be technologically appropriate for assessing the pipeline based on the type of failure that occurred on August 17, 2010, and should consider pressure testing and/or additional in-line inspections supplemented by complementary direct assessment as appropriate;
  - D. Include a detailed description of the inspection and repair criteria to be used in the field evaluation of any anomalies that are excavated. This is to include a description of how any defects are to be graded and the schedule for repairs or replacement;
  - E. Include provisions for continuing long-term periodic testing and integrity verification measures to ensure the ongoing safe operation of the Affected Pipeline Facility considering the results of the analyses, inspections, and corrective measures undertaken pursuant to this CAO;
  - F. Include an evaluation of the other BP pipelines in the Whiting area that may be encased in concrete. Provide a report on these lines describing the susceptibility of those pipelines to a failure similar to the one that occurred on the Affected Pipeline Facility on August 17, 2010. The report must describe previous inspections, tests, operating and construction history, prior assessments, and all other related data. Based on information gathered from the metallurgical testing and examination under Item 3, propose an integrity verification plan and remedial work plan for BP's other pipelines, as applicable;
  - G. Include a proposed schedule for completion of the actions required by paragraphs A-F of this Item.
- 5. Upon approval by the Director, the integrity verification and remedial work plan becomes incorporated into this CAO by reference and must be revised as necessary to incorporate the results of actions undertaken pursuant to this CAO and whenever necessary to incorporate new information obtained during the failure investigation and remedial activities. Submit any such plan revisions to the Director for prior approval. The Director may approve plan elements incrementally.
  - 6. Implement the work plan as approved by the Director, including any revisions to the plan.

7. Submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this CAO; and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report for the period from August 17, 2010 through November 30, 2010 is due by December 31, 2010.
8. Maintain documentation of the costs associated with implementation of this CAO. Include in each monthly report submitted, the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.
9. The Director may approve each submission required under this CAO in whole or in part and with or without modifications or conditions. Respondent must take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of a submission, Respondent must correct all deficiencies within the time specified by the Director, and resubmit it for approval.
10. The Director may allow the removal or modification of the pressure restriction required by Item 2 upon a written request from Respondent demonstrating that the hazard has been abated and that restoring the Affected Pipeline Facility to its pre-failure operating pressure or established MOP would be justified, based on a reliable engineering analysis showing that the pressure increase is safe considering all known defects, anomalies, and operating parameters of the Affected Pipeline Facility.
11. The Director may allow the removal or modification of the right-of-way inspections required by Item 2 upon a written request from Respondent demonstrating that such removal or modification would be justified considering all known defects, anomalies, and operating parameters of the Affected Pipeline Facility.

The Director may grant an extension of time for compliance with any of the terms of this CAO upon submission of a timely written request demonstrating good cause for the relief requested.

The actions required by this CAO are in addition to, and do not waive, any requirements that apply to Respondent's pipeline system under the Pipeline Safety Laws and Regulations or 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.

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 administrative assessment of civil penalties and in referral to the Attorney General for appropriate relief in a district court of the United States pursuant to 49 U.S.C. § 60120.

The terms and conditions of this CAO are effective upon service in accordance with 49 C.F.R. § 190.5.

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Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

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Date Issued