



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

JUL - 8 2003

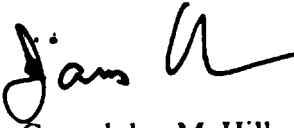
Mr. Lee Edwards
President
BP Pipelines North America, Inc
801 Warrenville Road
Lisle, IL 60532

Re: CPF No. 5-2002-5018M

Dear Mr. Edwards:

Enclosed is the Order Directing Amendment issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It makes a finding of inadequate procedures and requires that you amend your integrity management program procedures. When the terms of the Order are completed, as determined by the Director, Western Region, OPS, this enforcement action will be closed. Your receipt of the Order Directing Amendment constitutes service of that document under 49 C.F.R. § 190.5.

Sincerely,

for 
Gwendolyn M. Hill
Pipeline Compliance Registry
Office of Pipeline Safety

Enclosure

CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

In the Matter of

BP Pipelines North America, Inc.

Respondent.

CPF No. 5-2002-5018M

ORDER DIRECTING AMENDMENT

On February 5-7, 2002, pursuant to 49 U.S.C. § 60117, representatives of the Western and Southern Regions, Office of Pipeline Safety (OPS), inspected BP Pipelines North America, Inc.'s (Respondent's) integrity management program at Respondent's facility in Lisle, Illinois. As a result of the inspection, the Director, Western Region, OPS, issued to Respondent, by letter dated May 9, 2002, a Notice of Amendment (NOA). The NOA alleged inadequacies in Respondent's integrity management program segment identification procedures and proposed to require amendment of Respondent's procedures to comply with the requirements of 49 C.F.R. Part 195.

Respondent responded to the NOA by letter dated June 13, 2002. Respondent contested the NOA, offered an explanation, and requested a hearing. A hearing was held by telephone conference on February 20, 2003.

Background

The integrity management program regulations require hazardous liquid pipeline operators to have identified "all pipeline segments that could affect a high consequence area (HCA)...no later than December 31, 2001." 49 C.F.R. § 195.452(b)(1)(i) (Oct. 2001). OPS alleged that during its inspection, it found inadequacies in three areas of the technical procedures Respondent used to identify these segments. These inadequacies consisted of the following: (1) Respondent's procedures were oriented around only those pipeline segments it considered could be assessed by internal inspection and consisted mainly of flow diagrams lacking detailed methodologies for spill modeling in documented form; (2) Respondent's procedures did not identify all HCAs that could be affected, including those associated with certain drinking water and ecological unusually sensitive areas (USAs); and (3) Respondent's procedures did not provide for the periodic review of HCA boundaries to identify new geographic areas falling within the HCA definition, due to changes in factors such as population density.

In its response and at the hearing, Respondent did not demonstrate or even contend that it had fully documented segment identification procedures in place by the December 31 deadline. Rather, Respondent contested the NOA on the grounds that Section 195.452 could reasonably be interpreted to mean that although a full list of “could affect” segments had to be produced by December 31, 2001, the technical procedures used for segment identification were not required to be formally documented until March 31, 2002. Specifically, Respondent contended that although operators were required to identify all pipeline segments that could affect a HCA by December 31, 2001, the segment identification process is an element of the overall integrity management program which was not required to be documented until March 31, 2002. Respondent contended that under this interpretation, it conservatively listed all of the relevant pipeline segments as “could affect” segments by December 31, 2001, as a placeholder and then produced written segment identification procedures by March 31, 2002, that actually narrowed the list. Respondent argued that the NOA should be withdrawn because the OPS inspection was conducted in February of 2002, and the documentation containing written procedures was not required until March 31, 2002.

Discussion

The integrity management program requirements in 49 C.F.R. § 195.452 require hazardous liquid pipeline operators to develop a written integrity management program that identifies, assesses, and manages the risks on each pipeline that could affect a HCA in the event of a discharge. The first step, segment identification, had to be completed by December 31, 2001, and the program framework then had to be in place by March 31, 2002. A full and accurate identification of all pipeline segments that could affect HCAs was a crucial first step before an operator could implement further integrity management program requirements, such as the baseline assessment and remediation of the identified segments.

The process of determining which pipeline segments could affect HCAs involves identifying each HCA in the vicinity of a given pipeline, identifying the physical mechanisms by which pipeline discharges from a given segment can travel to a HCA, and analyzing how catastrophic spill scenarios associated with each geographic area would play out. The requirement that all “could affect” segments be identified by December 31, 2001, implies that a technically sound process be in place to do so. Evidencing their intent in this regard, the drafters of the integrity management regulations included an appendix providing guidance to operators on factors to consider in this process. 49 C.F.R. Part 195, Appendix C, Part I (B). Among these factors are the local topography, hydraulic gradients, climate, and the presence of longer range transport paths such as streams, waterways, and air dispersion. In addition, all assumptions used in the segment analysis, such as discharge volumes and response times, must be conservative or consistent with worst case scenarios. Recognized industry methodologies for calculating spill pool footprints must be utilized and any alternative methodologies must be supported by reliable engineering evaluations. Accordingly, the segment identification process requires a rigorous technical basis and written, descriptive procedures are necessary for an operator’s personnel to apply the process consistently in each geographic area where pipeline discharges can affect HCAs in order to accurately identify all affected segments. Moreover, without written procedures describing an operators segment identification process, pipeline safety inspectors cannot evaluate the process an operator uses and determine whether or not an operator has identified all relevant segments before implementing its integrity management program.

Conclusion

For the reasons discussed above, I do not accept Respondent's argument that the written segment identification procedures and technical justifications were not required before March 31, 2002. Respondent did not contest the allegations of inadequate procedures. Accordingly, I find that Respondent's integrity management program procedures are inadequate to ensure the safe operation of its pipeline system.

AMENDMENT OF PROCEDURES

Pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237, Respondent is ordered to make the following amendments to its integrity management program segment identification procedures:

Amend the procedures to include an accepted, technically sound land flow analysis using site-specific spill modeling that incorporates factors such as topological and hydraulic gradients that could stretch the spill pool footprint, or alternatively, provide adequate technical justifications demonstrating that the overland flow assumptions being used for determining buffer zone size are consistent with conservative or worst case discharge scenarios;

Amend the procedures to account for the presence of longer range transport paths such as streams and waterways, and air dispersion in the case of highly volatile liquid pipelines, that can transport releases of contaminants to HCAs;

Amend the procedures to ensure that all HCAs in the vicinity of the affected pipelines have been identified, including all drinking water and ecological unusually sensitive areas, whether or not such areas have been mapped in the Department of Transportation's National Pipeline Mapping System;

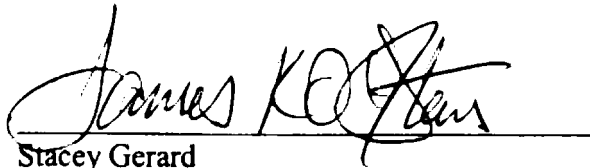
Amend the procedures to include a periodic review of HCA boundaries drawing on information from field personnel, control center data, census data, and other resources for the purpose of identifying areas newly falling within the HCA definition;

Within 30 days following receipt of this Final Order, submit the amended procedures and all technical justifications demonstrating compliance with this Order to the Director, Western Region, Office of Pipeline Safety, Golden Hills Center, Suite A-250, 12600 West Colfax Avenue, Lakewood, CO 80215-3736.

The Director, Western Region, OPS, may grant an extension of time to comply with any of the required items upon a written request by the Respondent demonstrating good cause for an extension.

Failure to comply with this Order may result in the assessment of civil penalties of up to \$100,000 per violation per day, or in the referral of the case for judicial enforcement.

The terms and conditions of this Order Directing Amendment are effective upon receipt.



Stacey Gerard
Associate Administrator
for Pipeline Safety

JUL - 8 2003

Date Issued