



U.S. Department
Of Transportation
**Pipeline and
Hazardous Materials
Safety Administration**

820 Bear Tavern Road, Suite 103
West Trenton, NJ 08628
609.989.2171

**NOTICE OF PROBABLE VIOLATION
and
PROPOSED COMPLIANCE ORDER**

EXPRESS OVERNIGHT MAIL

December 29, 2011

Jeremiah Ashcroft
Vice President of Field Operation
Buckeye Partners, L.P.
5 Tek Park
9999 Hamilton Boulevard
Breinigsville, PA 18031

CPF 1-2011-5013

Dear Mr. Ashcroft:

On July 23, 2009, Pipeline and Hazardous Materials Safety Administration (PHMSA) received notification (Notification #365) from Buckeye Partner, L.P. (Buckeye) through PHMSA's Integrity Management Database regarding a dent located on the top-side portion of its PY742PL pipeline that crosses the Delaware River.¹ Buckeye informed PHMSA that the dent met the immediate repair criteria.²

Through the Integrity Management Database, Buckeye further provided that it would not meet the schedule requirement for evaluation and remediation and that further reduction in the operating pressure would be impractical.³

¹ C.F.R. §195.450 Definitions. *High consequence area means:* (1) A commercially navigable waterway, which means a waterway where a substantial likelihood of commercial navigation exist;

² C.F.R. §195.452 (h)(4)(i)(D)

(h) *What actions must an operator take to address integrity issues?* (1)...

(4) *Special requirements for scheduling remediation - (i) Immediate repair conditions.* An operator's evaluation and remediation schedule must provide for immediate repair conditions. To maintain safety, an operator must temporarily reduce operating pressure or shut down the pipeline until the operator completes the repair of these conditions. An operator must calculate the temporary reduction in operating pressure using the formula in Section 451.6.2.2 (b) of ANSI/ ASME B31.4 (incorporated by reference, see § 195.3). An operator must treat the following conditions as immediate repair conditions:

³ C.F.R. §195.452(h)(1)(i)

(h) *What actions must an operator take to address integrity issues?*- (1) *General requirements.* An operator must take prompt action to address all anomalous conditions the operator discovers through the integrity assessment or

On September 9, 2010, Buckeye requested that PHMSA issue a Special Permit to excuse them from complying with 49 CFR §195.452 (h)(4)(i)(D). On September 14, 2011, PHMSA denied Buckeye's request.

Following Buckeye's Special Permit denial letter, Buckeye announced to PHMSA that it plans to replace the portion of its PY742PL pipeline that crosses the Delaware River. Buckeye stated that construction may commence in late September or early October 2012 with completion by the end of 2012.⁴ While Buckeye's current plan is to eventually replace the referenced portion of its pipeline, the dent still remains on it.

Buckeye has committed probable violations of Title 49 of the Code of Federal Regulations. The probable violations are cited below:

1. **§195.452 Pipeline integrity management in high consequence areas.**
 - (h) *What actions must an operator take to address integrity issues?*- (1) . . .
 - (4) *Special requirements for scheduling remediation* - (i) *Immediate repair conditions.* **An operator's evaluation and remediation schedule must provide for immediate repair conditions. To maintain safety, an operator must temporarily reduce operating pressure or shut down the pipeline until the operator completes the repair of these conditions. An operator must calculate the temporary reduction in operating pressure using the formula in Section 451.6.2.2 (b) of ANSI/ ASME B31.4 (incorporated by reference, see § 195.3). An operator must treat the following conditions as immediate repair conditions:**
 - (D) **A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) with a depth greater than 6% of the nominal pipe diameter.**

On June 30, 2009, Buckeye assessed the 8.625-inch diameter PY742PL pipeline that runs from Paulsboro, New Jersey and crosses the Delaware River to the Philadelphia, Pennsylvania Airport. Based on the in-line inspection (ILI) tool run, an anomaly was identified that met the immediate repair condition under §195.452(h)(4)(i)(D). The subject anomaly was measured to be an 8.2% deep dent on the top side of the pipe, about 75 feet off the north bank of the Delaware River. The PY742PL pipeline is inside of a 12.75-inch diameter casing.

On July 23, 2009, Buckeye sent notification to PHMSA that an immediate repair condition was determined from an ILI report. Buckeye explained that it could not immediately repair the pipeline because of the location of the dent, and Buckeye would not be reducing the operating pressure given that the pipeline has a relatively low maximum operating pressure

information analysis. In addressing all conditions, an operator must evaluate all anomalous conditions and remediate those that could reduce a pipeline's integrity. An operator must be able to demonstrate that the remediation of the condition will ensure the condition is unlikely to pose a threat to the long-term integrity of the pipeline. An operator must comply with § 195.422 when making a repair.

(i) *Temporary pressure reduction.* An operator must notify PHMSA, in accordance with paragraph (m) of this section, if the operator cannot meet the schedule for evaluation and remediation required under paragraph (h)(3) of this section and cannot provide safety through a temporary reduction in operating pressure.

⁴ PHMSA received a letter dated December 1, 2011 from Buckeye Partners, L.P. re: Docket No. PHMSA-2010-0261-Denial of Special Permit Request for PY742PL.

(MOP) of 274 pressure square inch gauge (psig) which is approximately 10.5% of the specified minimum yield strength (SMYS).

Notwithstanding these circumstances, Buckeye installed a control valve on the PY742PL pipeline in August 2009 to help protect the pipeline against pressure surges. In November 2009, Buckeye further investigated the pipeline with a high resolution magnetic flux leakage (MFL) ILI tool. Subsequently, Buckeye contracted a firm to perform and provide an Engineering Critical Assessment Report on the 8.2% dent, which was issued on September 8, 2010. That report included a review of historical operating pressure and strain analysis. The report concluded that if historical operating parameters are maintained into the future, there is a very low risk of the dent experiencing a cyclical fatigue failure.

As of the date of this Notice of Probable Violation, the 8.2% dent on the PY742PL pipeline still remains.

Buckeye has failed to complete an evaluation and remediation of an immediate repair condition on the PY742PL pipeline, as prescribed by §195.452 (h)(4)(i)(D).

2. §195.575 Which facilities must I electrically isolate and what inspections, tests, and safeguards are required?

(a) You must electrically isolate each buried or submerged pipeline from other metallic structures, unless you electrically interconnect and cathodically protect the pipeline and the other structures as a single unit.

(b) You must install one or more insulating devices where electrical isolation of a portion of a pipeline is necessary to facilitate the application of corrosion control.

(c) You must inspect and electrically test each electrical isolation to assure the isolation is adequate.

(d) If you install an insulating device in an area where a combustible atmosphere is reasonable to foresee, you must take precautions to prevent arcing.

(e) If a pipeline is in close proximity to electrical transmission tower footings, ground cables, or counterpoise, or in other areas where it is reasonable to foresee fault currents or an unusual risk of lightning, you must protect the pipeline against damage from fault currents or lightning and take protective measures at insulating devices.

During the Special Permit application review, PHMSA requested that Buckeye provide cathodic protection tests on the subject pipeline and casing. Buckeye installed a casing test lead on the south side of the Delaware River, and then on February 18, 2011 submitted an initial pipe-to-soil reading for both the 8.625-inch diameter pipeline and 12.75-inch diameter casing to PHMSA.⁵ The reading results were:⁶

Pipeline = -2.26 V
 Casing = -2.25 V

⁵ Buckeye Partners Letter of Decision with Buckeye Partners Special Permit Analysis and Findings re: Docket # PHMSA-2010-0261.

⁶ Id.

Buckeye performed additional tests and on February 25, 2011, Buckeye confirmed to PHMSA there was a metallic short between the pipeline and the casing.⁷ Therefore, the metallic short on PY742PL pipeline does not meet the isolation, inspection, tests and safeguards prescribed in §195.575.⁸

Proposed Compliance Order

With respect to Items 1 and 2 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Buckeye. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

Any correspondence relating to this Notice should be addressed to: Byron Coy, PE, Director, PHMSA Eastern Region, 820 Bear Tavern Road, Suite 103, W. Trenton, NJ 08628. Please refer to **CPF 1-2011-5013** on each document you submit, and please provide a (signed) copy in electronic format whenever possible. Smaller files may be emailed to Byron.Coy@dot.gov. Larger files should be sent on a CD accompanied by the original (signed) paper copy to the Eastern Region Office.

Sincerely,

Byron Coy, PE
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

⁷ Id.

⁸ Id.

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes a Compliance Order incorporating the following remedial requirements to ensure the compliance of Buckeye Partner, L.P. (Buckeye) with the pipeline safety regulations:

1. In regards to Item Number 1 of the Notice pertaining to §195.452 (h)(4)(i)(D), Buckeye must verify that the referenced control valve is installed correctly on the PY742PL pipeline and that the set point is adjusted to protect the integrity of the pipeline from pressure surges. This work must be completed within 30 days of receipt of a Final Order.
2. In regards to Item Number 1 of the Notice pertaining to §195.452 (h)(4)(i)(D), Buckeye must complete the repair of the subject dent on PY742PL pipeline within 18 months of issuance of a Final Order. The repair must be performed in accordance with §195.422 and Buckeye's Operation and Maintenance Manual, as appropriate.
3. In regards to Item Number 2 of the Notice pertaining to §195.575, Buckeye must bring its PY742PL pipeline into compliance with §195.575 within 18 months of issuance of a Final Order.
4. To assure safe operation, Buckeye must commence periodic shut-in integrity tests on its PY742PL pipeline. These tests will include, but not limited to:
 - a. Suspending operation at a moderate pressure level for one (1) hour and documenting the pressure over that interval; and
 - b. Analyzing any pressure variations that occurred during that one (1) hour interval.

Buckeye must perform the test at least once every sixteen (16) days. The initial test must be performed within 30 days of issuance of the Final Order. Buckeye must continue to perform these shut-in integrity tests until items 2 and 3 above are completed.

5. Buckeye must complete all the above items within the stipulated timeframe unless Buckeye abandons this portion of the pipeline. Buckeye may abandon this portion of the pipeline in accordance to §195.402(c)(10) and Buckeye's Operation and Maintenance Manual, as appropriate. After Buckeye has abandoned this portion of the pipeline, Buckeye will no longer be required to comply with the items in this Compliance Order.
6. Regarding the above items, Buckeye must make all related records and procedures available for review by the Director, upon request.
7. Commencing at the end of the calendar quarter that occurs after issuance of the Final Order, Buckeye must submit quarterly summary reports detailing the actions taken regarding the above items, with supporting documentation to the Director, Eastern Region, Pipeline and Hazardous Materials Safety Administration, 820 Bear Tavern Rd, Suite **103**, West Trenton, NJ 08628.
8. It is requested (not mandated) that Buckeye maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director, Eastern Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.