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
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER

UPS OVERNIGHT DELIVERY

May 6, 2013

Thomas Scott Collier
Vice President, Performance Assurance & Asset Integrity
Buckeye Partners, L.P.
Five TEK Park
9999 Hamilton Boulevard
Breinigsville, PA 18031

CPF 1-2013-5006

Dear Mr. Collier:

On May 21, 2010, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code, initiated an investigation of an accident that occurred on Buckeye Partners, L.P.'s (Buckeye) pipe, designated Line LZ601XX, in Linden, New Jersey, on May 20, 2010. The accident involved a release of refined petroleum and resulted in property damage.

Line LZ601XX is a part of Buckeye's "Linden to NY State Line" pipeline system that consists of two 12 inch diameter, 0.25 inch wall thickness pipelines both 32 miles long, that delivers refined petroleum products such as diesel, fuel oil, kerosene and jet fuel to JFK Airport, LaGuardia Airport and other shippers in the Long Island, New York area. The maximum operating pressure of Line LZ601XX is 1,200 pounds per square inch gauge (psig). The pipe is coated with an external coal tar coating and has an impressed current cathodic protection system.

On May 20, 2010, Colonial Pipeline Company (Colonial) received a call from a member of the public about a puddle of oil near Grasseli Road and South Wood Avenue in Linden, New Jersey. Colonial contacted Buckeye since both operators had pipelines in that area. International-Matex Tank Terminal, Inc. (IMTT) was contacted also, for the same reason. Buckeye notified the National Response Center (NRC)[1] that it, along with Colonial and IMTT, were investigating a pipeline leak in the vicinity of that area.

[1] NRC Report # 941049.

Buckeye dispatched its personnel to that area to determine whether their pipe was leaking. When Buckeye personnel arrived on-site, they determined that their pipe, Line LZ601XX, had a pinhole leak.

Line LZ601XX had been shut down, with product in it, for maintenance prior to the accident. The estimated pressure at the point and time of the accident was 282 psig. An estimated one (1) barrel of refined petroleum product was released from the pipe, approximately 1,100 feet east of the New Jersey Turnpike. The spill contaminated the soil and the surface water in Piles Creek. Buckeye took emergency containment measures.

This accident occurred in an area surrounded by industrial facilities. This accident also occurred in an area that is identified as a high population area[2] and unusually sensitive area.[3]

On June 17, 2010, Buckeye filed an accident report on DOT Form 7000-1(Accident Report)[4] with PHMSA.

As a result of the investigation, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violations are:

1. §195.581 Which pipelines must I protect against atmospheric corrosion and what coating material may I use?

(a) You must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.

(b) Coating material must be suitable for the prevention of atmospheric corrosion.

(c) Except portions of pipelines in offshore splash zones or soil-to-air interfaces, you need not protect against atmospheric corrosion any pipeline for which you demonstrate by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will-

(1) Only be a light surface oxide; or

(2) Not affect the safe operation of the pipeline before the next scheduled inspection.

Buckeye failed to protect the soil-to-air interface of its Line LZ601XX against atmospheric corrosion. As a result, external corrosion occurred at the soil-air-interface of Line LZ601XX and the pipe ultimately raptured.

Prior to the accident, on August 19, 2008, Buckeye performed a visual inspection at the soil-to-air interface of Line LZ601XX, which was documented in *Visual Inspection of Normally Exposed Pipe*. This inspection record, in the "CONDITION OF COATING: Remarks" section, noted that the "[soil-to-air] interface on both sides of both lines needs to . . . be repaired" and that "[s]evere coating disbondment [was present]." Despite the fact that this inspection found deteriorated coating conditions and indicated that repair to the soil-to-air interface was needed, at the time of PHMSA's accident investigation, Buckeye could not provide any records indicating Buckeye performed any repairs as a result of this inspection.

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[2] §195.450 Definitions.
The following definitions apply to this section and §195.452: . . .
(2) A *high population area*, which means an urbanized area, as defined and delineated by the Census Bureau, that contains 50,000 or more people and has a population density of at least 1,000 people per square mile;

[3] §195.450 Definitions.
The following definitions apply to this section and §195.452: . . .
(4) An *unusually sensitive area*, as defined in §195.6.

[4] This Notice refers to Buckeye's Final Accident Report DOT Form 7000-1, last revision date: August 5, 2011.

According to Buckeye's atmospheric corrosion procedures that were in effect at the time, *Maintenance Manual, J-4 – Visual Pipe Inspection,* visual inspections of normally exposed pipes designed to span creeks were done once a year.[5] Consequently, following the August 19, 2008 inspection described above, Buckeye next inspected this location on August 1, 2009. However, despite the findings of the previous inspection and the fact that there was no evidence of repairs since the previous inspection, the record for the August 1, 2009 inspection noted no problems with the soil-to-air interface and there was no mention of severe coating disbondment.

On May 20, 2010, Buckeye's pipe, Line LZ601XX, leaked at this soil-to-air interface.

The Accident Report confirmed that there was a pinhole leak at the soil-to-air interface of Line LZ601XX at mile post (MP) 90+13. The Accident Report also stated that the apparent cause of the accident was external corrosion.[6]

Buckeye sent the failed pipe segment to Det Norske Veritas (U.S.A.), Inc. (DNV) for a metallurgical analysis. DNV's final report[7] established that the leak occurred in an area of disbonded coating where the pipeline transitioned from above ground to buried service. The report concluded that "the pipe leaked at a 0.5-inch crack that formed in a region of deep external corrosion." The report also stated that "the remaining wall thickness adjacent to the crack was approximately 0.02 inches", or 8%.

During the accident investigation, Buckeye's compliance manager for the Linden facility stated that after the 2008 visual inspection, Buckeye developed a project that was supposed to address repair work to this soil-to-air interface. The project was scheduled to be completed in mid-2010. The PHMSA inspector requested that Buckeye provide documentation demonstrating that the soil-to-air interface at this location was remediated. Buckeye was unable to provide any records demonstrating that these repairs were made.

Based on the foregoing evidence, Buckeye failed to protect the soil-to-air interface of its Line LZ601XX against atmospheric corrosion from the time it performed the visual inspection and noted severe coating disbondment on August 19, 2008.

2. §195.452 Pipeline integrity management in high consequence areas.

(a) . . .

(f) *What are the elements of an integrity management program?* An integrity management program begins with the initial framework. An operator must continually change the program to reflect operating experience, conclusions drawn from results of the integrity assessments, and other maintenance and surveillance data, and evaluation of consequences of a failure on the high consequence area. An operator must include, at minimum, each of the following elements in its written integrity management program:

(1) . . .

(3) An analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure (see paragraph (g) of this section);

Prior to August 27, 2010, Buckeye did not include the element of an analysis that integrates all available information about the integrity of the entire pipeline and the consequences of a failure in its written integrity management program, as required by §195.452(f)(3). Section 195.452(f)(3) refers to section

[5] Maintenance Manual, J-4-Visual Pipe Inspection Issued: 4/08 and 6/09, references Comprehensive Scheduling Chart- Regulatory Inspections (Maintenance Manual Section D-01, Ex. A), Normally Exposed Spans (pipeline) . . . 1 Time/Yr.

[6] Accident Report, at 6.

[7] Det Norske Veritas, Final Report, Metallurgical Analysis of Leak on 12-Inch Diameter Pipeline (May 20, 2010), Buckeye Partners, L.P.

195.452(g) which itemizes the information that an operator must analyze.[8] Buckeye's written integrity management program did not provide an analysis process to correlate in-line inspection (ILI) indications with other sources of data.

During the accident investigation, a PHMSA inspector requested a copy of Buckeye's written integrity management program that defined how it would assess anomalies that have been identified in an ILI report. Buckeye provided the procedure, *Data Integration Procedure, Buckeye Partners, L.P.* (August 27, 2010). This procedure is inadequate because it fails to specify that data collected from inspections, tests, surveillance and patrols is used to make a decision on the integrity of its pipeline (e.g. atmospheric corrosion inspection results).[9] The PHMSA inspector then requested the version prior to August 27, 2010. Buckeye was unable to provide a previous version of the procedure. Buckeye's compliance manager for the Linden facility, stated that the "Data Integration procedure developed over time up to the August 27, 2010 official document."

Therefore, Buckeye did not have procedures that addressed §195.452(f)(3) prior to August 27, 2010.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed$200,000 per violation per day the violation persists up to a maximum of $2,000,000 for a related series of violations.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed $200,000 per violation per day the violation persists up to a maximum of $2,000,000 for a related series of violations. For violations occurring prior to January 3, 2012, the maximum penalty may not exceed $100,000 per violation per day, with a maximum penalty not to exceed $1,000,000 for a related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violations and has recommended that you be preliminarily assessed a civil penalty of $418,700 as follows:

Item number	PENALTY
1	$290,000
2	$128,700

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.

[8] 195.452(g) *What is an information analysis*? In periodically evaluating the integrity of each pipeline segment (paragraph (j) of this section), an operator must analyze all available information about the integrity of the entire pipeline and the consequences of a failure. This information includes:
(1) Information critical to determining the potential for, and preventing, damage due to excavation, including current and planned damage prevention activities, and development or planned development along the pipeline segment;
(2) Data gathered through the integrity assessment required under this section;
(3) Data gathered in conjunction with other inspections, tests, surveillance and patrols required by this Part, including, corrosion control monitoring and cathodic protection surveys; and
(4) Information about how a failure would affect the high consequence area, such as location of the water intake.

[9] The information in such an analysis must include data gathered in conjunction with other inspections, tests, surveillance and patrols required by Part 195, including, corrosion control monitoring and cathodic protection surveys, as required by §195.452(g)(3).

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. All material you submit in response to this enforcement action may be 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.

Please submit all correspondence in this matter to Byron Coy, PE, Director, PHMSA Eastern Region, 820 Bear Tavern Road, Suite 103, W. Trenton, NJ 08628. Please refer to **CPF 1-2013-5006** on each document you submit, and please whenever possible, provide a signed PDF copy in electronic format. Smaller files may be emailed to Byron.Coy@dot.gov. Larger files should be sent on a CD accompanied by the original paper copy to the Eastern Region Office.

Sincerely,

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

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

PROPOSED COMPLIANCE ORDER

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

1. With respect to Item 1 of the Notice, Buckeye must amend its corrosion control procedures to give detailed instructions for inspections of pipeline or portion of pipeline that is exposed to the atmosphere, particularly at soil-to air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations and in spans over water, in accordance with §195.583(b). Buckeye must submit the amended procedure within sixty (60) days of receipt of the Final Order.

2. With respect to Item 2 of the Notice, Buckeye must amend its written integrity management program for its facility in Linden, New Jersey to include a process to analyze all available information about the integrity of the entire pipeline and the consequences of a failure, as prescribed in §195.452(f)(3). Buckeye must submit the amended procedures within sixty (60) days of receipt of the Final Order.

3. All submissions must be sent to Byron Coy, PE, Director, PHMSA Eastern Region, 820 Bear Tavern Road, Suite 103, West Trenton, NJ 08628. Please refer to **CPF 1-2013-5006** on each document you submit.

4. 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 Byron Coy, 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.