



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
609.771.7800

**NOTICE OF PROBABLE VIOLATION
and
PROPOSED CIVIL PENALTY**

VIA ELECTRONIC MAIL TO: jsauger@buckeye.com

May 5, 2023

Mr. Joseph Sauger
Senior Vice President of Operations and Engineering
Buckeye Partners, LP
One Greenway Plaza, Suite 600
Houston, Texas 77046

CPF 1-2023-011-NOPV

Dear Mr. Sauger:

From March 16, 2021 through May 30, 2021, 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 (U.S.C.) investigated Buckeye Partners, LP's (Buckeye) in-service, rupture in Linden, NJ.

On March 16, 2021, at 5:26 am Eastern Standard Time (EST), Buckeye Line 602 ruptured releasing 353 barrels (bbls) of unleaded gasoline into a marsh in Linden, New Jersey.

As a result of the investigation, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items investigated and the probable violations are:

1. **§ 195.452 Pipeline integrity management in high consequence areas.**
 - (a) ...
 - (b) **What program and practices must operators use to manage pipeline integrity? Each operator of a pipeline covered by this section must:**
 - (1) ...
 - (5) **Implement and follow the program.**

Buckeye failed to follow its manual of written integrity management procedures. Specifically,

Buckeye failed to follow its *Integrity Management Program Manual – Appendix G-II – Data Integration Procedure*, dated 05/11/17 (IMP), regarding reviews and integration of data from current and previous ILI results.

The IMP Section 5.2 stated in part, “Information obtained as a result of the most recent ILI survey is correlated with that obtained as a result of the previous ILI survey. Features identified by the most recent ILI survey are matched, as best as possible, to those identified by the previous ILI survey. Feature information from the previous ILI survey is incorporated into the pipeline listing for the features that were able to be matched...The Event Type, Depth, Length, and Orientation are compared for the matched features. Significant changes in depth, length, and orientation are identified for further review.”

The IMP Section 5.3 stated in part, “Joints of pipe with a high density of metal loss features, as identified by the most recent ILI survey, are reviewed for the purpose of identifying high density areas with a significant change in metal loss density from the previous ILI survey.”

During the investigation, PHMSA requested ILI records for the 2019 and 2014 runs on line 602. Buckeye provided its *Baker Hughes Final Inspection Report*, dated 11/03/2014 (2014 ILI) and its *Baker Hughes CPIG In-Line Inspection Final Report*, dated 10/28/2019 (2019 ILI). A review of the 2014 ILI and 2019 ILI for the joint associated with the Line 602 release revealed that fewer anomalies were boxed in the 2019 ILI run than in the 2014 ILI run. According to the IMP procedures, feature information from the previous ILI survey is incorporated into the pipeline listing, and significant changes in event type, depth, length, and orientation are identified and noted for further review. Thus, a reduction in boxed anomalies should have been noted for further review¹.

Therefore, Buckeye failed to follow its procedures for reviewing and integrating data from current and previous ILI results in accordance with § 195.452(b)(5).

2. § 195.446 Control room management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section. The procedure required by this section must be integrated, as appropriate with the operator’s written procedures required by §195.402...

Buckeye failed to follow its written control room management procedures. Specifically, Buckeye failed to follow its *Control Room Operating Manual*, dated 12/18/19 (CROM) regarding shift change documentation in accordance with § 195.446.

The CROM Section 2.3.1.2 stated in part, “Shared information between Outgoing Controllers and Incoming Controllers includes, but is not limited to, the following: Notable incidents, events, or

¹ See also *Root Cause Failure Analysis of Line 602 Release (3/16/21)* (July 16, 2021) recommendations at 22.

safety concerns occurring during the shift (information shared via Shift Notes in STAR), Current abnormal or emergency situations (information shared via the Pipeline Status in STAR), An Alarm review to include active, inhibited, nuisance, off-scan, and recurring/persistent alarms (information shared via Desk Log issues in STAR)”

During the investigation, PHMSA requested records related to shift changes during the event. Buckeye provided its *Release Shift Change Log*, dated 03/16/2021 (Change Log), identified by Buckeye as from its STAR system, which documented a 6:00 AM shift change on 3/16/21 for the controller responsible for Line 602. The Change Log failed to demonstrate that any emergencies and/or abnormal operating events were communicated as part of the shift change. The Change Log also lacked a ‘Pipeline Status’ field where current abnormal or emergency situations were required to be documented per the Section 2.3.1.2 procedure.

Therefore, Buckeye failed to follow its procedures for shift change documentation in accordance with § 195.446.

3. § 195.446 Control room management.

(a) General. This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section. The procedure required by this section must be integrated, as appropriate with the operator’s written procedures required by §195.402...

Buckeye failed to follow its written control management room procedures. Specifically, Buckeye failed to follow its *Operations and Maintenance Manual Appendix A – Automated Abnormal Operating Event Workflow*, dated 01/16/17 (O&M), and *Control Room Operating Manual*, dated 12/18/19 (CROM), regarding investigating SCADA indications of a leak in accordance with § 195.446.

The CROM Section 3.2 stated in part, “An AOC is a condition requiring an immediate response from the Controller to prevent the shutdown of the pipeline system. If an abnormal operating condition is not responded to and eliminated promptly by a Controller, it could result in an emergency condition.... If one or more of the preceding conditions exist, the Controller should take action to identify the cause of the issue(s) and correct the issue(s) in an expedient manner.”

The CROM Section 3.4.5.2 stated in part, “The procedure following the Unexpected Imbalance workflow below provides the steps required by a Controller to address unexpected imbalances. If the cause of a leak signature combined with an imbalance alarm cannot be determined within ten minutes or less, the Controller takes action to secure the pipeline until an investigation into the cause of the alarm is completed.”

The O&M Section 1 stated in part, “Controllers and Field Operators shall initiate a new Abnormal Operating Event (AOE) Workflow for every abnormal operating event that occurs on a Pipeline System or Local Facility that is under his/her control. The link to initiate an AOE Workflow is

accessible from the Breinigsville and Mont Belvieu Control Center SharePoint pages. Field Locations can access the link from their respective Asset Team SharePoint Page.”

During its investigation, PHMSA requested the Supervisory Control and Data Acquisition (SCADA) event logs for the day of the event. Buckeye provided its *SCADA Event Log*, dated 03/15/2021 (Event Log). Based on a review of the Event Log and additional investigation, Buckeye failed to properly investigate SCADA indications of the leak. The Event Log showed that the SCADA provided the controller a high-high flow alarm and then a leak alarm, both of which were acknowledged by the controller. The controller’s actions indicate that they believed this was a control valve issue and 11 minutes later restarted a small booster pump for about 30 seconds. Pressure and flow rates did not appear as they should have for a typical restart and technicians at the Linden Station proceeded to investigate a possible control valve issue. Upon the Control Room change over at 6:00 am, the new controller recognized an issue and began providing notifications of a possible release. The AOE workflow was not followed until the changeover occurred.

Following the incident and pursuant to the Corrective Action Order 1-2021-034-CAO, Buckeye conducted a root cause failure analysis (RCFA) of the incident. Based on the determinations contained within the RCFA report, the written control room management procedures for investigating SCADA indications were not followed².

Therefore, Buckeye failed to follow its written control room management procedures for investigating SCADA indications of a leak in accordance with § 195.446(a).

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$257,664 per violation per day the violation persists, up to a maximum of \$2,576,627 for a related series of violations. For violation occurring on or after March 21, 2022 and before January 6, 2023, the maximum penalty may not exceed \$239,142 per violation per day the violation persists, up to a maximum of \$2,391,412 for a related series of violations. For violation occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not exceed \$225,134 per violation per day the violation persists, up to a maximum of \$2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed \$222,504 per violation per day the violation persists, up to a maximum of \$2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed \$218,647 per violation per day the violation persists, up to a maximum of \$2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed \$213,268 per violation per day, with a maximum penalty not to exceed \$2,132,679. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed \$209,002 per violation per day, with a maximum penalty not to exceed \$2,090,022.

We have reviewed the circumstances and supporting documentation involved for the above probable violations and recommend that you be preliminarily assessed a civil penalty of \$441,151 as follows:

² See RCFA at 26.

<u>Item number</u>	<u>PENALTY</u>
1	\$ 218,647
3	\$ 222,504

Warning Item

With respect to Item 2, we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct this item. Failure to do so may result in additional enforcement action.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement 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).

Following the receipt of this Notice, you have 30 days to respond as described in the enclosed *Response Options*. 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. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from the receipt of this Notice. The Region Director may extend the period for responding upon a written request timely submitted demonstrating good cause for an extension.

In your correspondence on this matter, please refer to **CPF 1-2023-011-NOPV**, and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Robert Burrough
Director, Eastern Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Enforcement Proceedings*