

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 6, 2009

Mr. Brian Jury
Vice President, Field Operations
Buckeye Partners, L.P.
5 TEK Park
9999 Hamilton Blvd
Breinigsville, PA 18031

CPF 1-2009-5001M

Dear Mr. Jury:

During the May to December 2008 time interval, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the State of New York Department of Public Safety pursuant to Chapter 601 of 49 United States Code inspected Buckeye Partners, L.P. (BPL) procedures for Operations and Maintenance and Operator Qualification in Breinigsville, Pennsylvania.

On the basis of the inspection, PHMSA has identified apparent inadequacies within BPL's plans or procedures, as described below:

- 1. §195.52 Telephonic notice of certain accidents.**
 - (a) At the earliest practicable moment following discovery of a release of the hazardous liquid or carbon dioxide transported resulting in an event described in §195.50, the operator of the system shall give notice,**

The BPL Emergency Manual does not specify a reporting timeframe for notifying PHMSA following discovery and/or indication of a release. BPL needs to amend their Emergency Manual to specify reporting guidelines for notifying PHMSA following discovery and/or indication of a release.

2. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
 - (c) **Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:**
 - (3) **Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.**
 - A. BPL does not have a clear statement of policy that operating, maintaining, and repairing of the system will be in accordance with each the requirements of Part 195 subpart F and Subpart H. BPL needs to provide a clear statement of policy with regard to the operating, maintaining, and repairing of the system will be in accordance with each the requirements of Part 195 subpart F and Subpart H.
 - B. BPL has documented record retention schedules related to §195.402 in the BPL Human Resources Manual but not in the operation, maintenance, and safety procedures. BPL should document record retention schedules where they are applicable.
3. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
 - (d) **Abnormal operation. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded;**

BPL Operations Manual Procedure I-02 – Valve closure, 2. Pressure Surges makes an incorrect reference to the Maintenance Manual for Procedure I-07, which does not exist. BPL needs to reference the correct procedure.

4. **§195.505 Qualification program.**

Each operator shall have and follow a written qualification program. The program shall include provisions to:

 - (b) **Ensure through evaluation that individuals performing covered tasks are qualified;**
 - A. The BPL Training Manual states that some covered tasks provide for evaluation demonstrations to take place of two individuals simultaneously. But the BPL Training Manual does not state which covered tasks come under this evaluation method. BPL should amend the training manual to address which covered tasks allow for the demonstration evaluations of two individuals to occur simultaneously.

- B. The BPL Training Manual states that prior work history may be an acceptable method of evaluation. However, BPL said it does not utilize this method for evaluation. BPL should amend the training manual to state only the methods of evaluation BPL uses for evaluation of individuals.

5. §195.505 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(h) After December 16, 2004, provide training as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner to ensure the safe operation of pipeline facilities;

The BPL Training Manual does not indicate which referenced training methods are used for initial qualification, retraining and reevaluation of individuals performing covered tasks. BPL needs to amend the Training Manual to reference the training methods that are used for initial qualification, retraining and reevaluation of individuals performing covered tasks.

6. §195.505 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(i) After December 16, 2004, notify the Administrator or a state agency participating under 49 U.S.C. Chapter 601 if the operator significantly modifies the program after the Administrator or state agency has verified that it complies with this section.

The BPL Operator Qualification (OQ) program does not have criteria defining what constitutes a significant program change that requires PHMSA or state agency notification. BPL needs to amend the OQ program to better define significant program changes that would require BPL to notify PHMSA or state agency.

7. § 195.452 Pipeline integrity management in high consequence areas.

(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:

(8) A process for review of integrity assessment results and information analysis by a person qualified to evaluate the results and information (see paragraph (h)(2) of this section).

The BPL Integrity Management Plan (IMP) does not reference the location of specific qualification requirements for operator personnel who review and evaluate ILI assessment results.

8. § 195.452 Pipeline integrity management in high consequence areas.

(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:*

(4) *Criteria for remedial actions to address integrity issues raised by the assessment methods and information analysis (see paragraph (h) of this section);*

The BPL IMP does not describe how expected ILI tool specifications are to be communicated to ILI tool vendors.

9. § 195.452 Pipeline integrity management in high consequence areas.

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 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.

(2) Discovery of condition. Discovery of a condition occurs when an operator has adequate information about the condition to determine that the condition presents a potential threat to the integrity of the pipeline. An operator must promptly, but no later than 180 days after an integrity assessment, obtain sufficient information about a condition to make that determination, unless the operator can demonstrate that the 180-day period is impracticable.

- A. The BPL process for validation of ILI results is not sufficiently formalized to ensure that ILI tools perform within the vendor's written performance specification. Requirements have not been established to document what method(s) were used to validate each ILI assessment.
- B. The BPL IMP does not provide a clear definition of what constitutes discovery or the timeframes when discovery must occur, other than the regulatory deadline of within 180 days of completion of an ILI assessment.

10. § 195.452 Pipeline integrity management in high consequence areas.

(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:

- A. The BPL IMP Chapter 5 description does not define the expected process or the minimum set of data that must be considered in the post-assessment process for the integration of ILI results.
- B. Data should also be integrated at the time the dig list is developed.

11. § 195.452 Pipeline integrity management in high consequence areas.

(c) *What must be in the baseline assessment plan?* (1) An operator must include each of the following elements in its written baseline assessment plan:

(i) The methods selected to assess the integrity of the line pipe. An operator must assess the integrity of the line pipe by any of the following methods. The methods an operator selects to assess low frequency electric resistance welded pipe or lap welded pipe susceptible to longitudinal seam failure must be capable of assessing seam integrity and of detecting corrosion and deformation anomalies.

(C) External corrosion direct assessment in accordance with §195.588; or

BPL procedures do not adequately specify notification requirements that must be followed if other technology is to be pursued. IMP procedures mentions notification for direct assessment.

12. § 195.422 Pipeline repairs

(a) Each operator shall, in repairing its pipeline systems, insure that the repairs are made in a safe manner and are made so as to prevent damage to persons or property.

(b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.

BPL procedures do not differentiate between using a Clock Spring repair method to repair internal or external corrosion/defects. BPL procedures allow the use of Clock Spring for repair in internal defects without performing a critical engineering analysis to substantiate its suitability. Without a critical engineering analysis, using the Clock Spring method for internal defects may only be a temporary repair. Refer to BPL Maintenance Procedure MA E-08.

13. § 195.405 Protection against ignitions and safe access/egress involving floating roofs.

(a) After October 2, 2000, protection provided against ignitions arising out of static electricity, lightning, and stray currents during operation and maintenance activities involving aboveground breakout tanks must be in accordance with API Recommended Practice 2003, unless the operator notes in the procedural manual (§195.402(c)) why compliance with all or certain provisions of API Recommended Practice 2003 is not necessary for the safety of a particular breakout tank.

BPL maintenance procedures do not require ignition protection for tanks per API RP 2003. BPL needs to incorporate that recommended practice or some equivalent process.

14. § 195.307 Pressure testing aboveground breakout tanks.

(a) For aboveground breakout tanks built to API Specification 12F and first placed in service after October 2, 2000, pneumatic testing must be in accordance with section 5.3 of API Specification 12F.

(b) For aboveground breakout tanks built to API Standard 620 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 7.18 of API Standard 620 (incorporated by reference, *see* §195.3).

(c) For aboveground breakout tanks built to API Standard 650 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 5.3 of API Standard 650.

(d) For aboveground atmospheric pressure breakout tanks constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated and tanks built to API Standard 650 or its predecessor Standard 12C that are returned to service after October 2, 2000, the necessity for the hydrostatic testing of repair, alteration, and reconstruction is covered in section 10.3 of API Standard 653.

(e) For aboveground breakout tanks built to API Standard 2510 and first placed in service after October 2, 2000, pressure testing must be in accordance with ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 or 2.

BPL maintenance procedures do not specify when aboveground breakout tanks are required to have pressure testing.

15. § 195.410 Line markers.

(a) Except as provided in paragraph (b) of this section, each operator shall place and maintain line markers over each buried pipeline in accordance with the following:

(1) Markers must be located at each public road crossing, at each railroad crossing, and in sufficient number along the remainder of each buried line so that its location is accurately known.

The BPL Maintenance Manual (MA) D-02 for pipeline right-of-ways does not include guidance on line marker spacing to help assure the line location is accurately marked.

16. § 195.412 Inspection of rights-of-way and crossings under navigable waters.

(a) Each operator shall, at intervals not exceeding 3 weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way.

BPL MA A-02, Right-of-Way Encroachment Policy Section 2.5, states that "a clear right-of-way is essential." This procedure needs more definitive guidance on responsibilities and actions that may be needed to maintain or restore a clear right-of-way.

17. § 195.452 Pipeline integrity management in high consequence areas.

(j) *What is a continual process of evaluation and assessment to maintain a pipeline's integrity?*

(2) *Evaluation.* An operator must conduct a periodic evaluation as frequently as needed to assure pipeline integrity. An operator must base the frequency of evaluation on risk factors specific to its pipeline, including the factors specified in paragraph (e) of this section. The evaluation must consider the results of the baseline and periodic integrity assessments, information analysis (paragraph (g) of this section), and decisions about remediation, and preventive and mitigative actions (paragraphs (h) and (i) of this section).

(3) *Assessment intervals.* An operator must establish five-year intervals, not to exceed 68 months, for continually assessing the line pipe's integrity. An operator must base the assessment intervals on the risk the line pipe poses to the high consequence area to determine the priority for assessing the pipeline segments. An operator must establish the assessment intervals based on the factors specified in paragraph (e) of this section, the analysis of the results from the last integrity assessment, and the information analysis required by paragraph (g) of this section.

- A. The BPL IMP has not defined the timeframes to conduct periodic evaluations. The process for the conduct of periodic evaluations does not establish sufficient guidance to achieve repeatable results. Also, the process should consider the condition of the line based on the last assessment and applicable risk factors.

- B. The BPL Stress Corrosion Cracking (SCC) screening criteria includes a greater than 100 degree temperature screening factor which is not an appropriate screening criteria to understand low or near-neutral pH SCC as a potential threat in high consequence pipeline areas. There is a PHMSA Advisory Notice ADB-03-05 that addresses the SCC threat to Gas and Hazardous Liquid Pipelines.

18. § 195.452 Pipeline integrity management in high consequence areas.

(b) *What program and practices must operators use to manage pipeline integrity?*

Each operator of a pipeline covered by this section must:

(2) Include in the program an identification of each pipeline or pipeline segment in the first column of the following table not later than the date in the second column:

| Pipeline | Date |
|------------|-------------------------------------|
| Category 1 | December 31, 2001. |
| Category 2 | November 18, 2002. |
| Category 3 | Date the pipeline begins operation. |

BPL IMP Chapter 3 states that an HCA analysis will be performed on any pipelines that are part of an acquisition, are newly constructed or newly operated by Buckeye within one year of their first day in-service or operation by Buckeye. However, the regulation requires that HCA analysis be conducted prior to the date the pipeline begins operation. The BPL IMP needs to be amended to address the regulation requirement.

19. § 195.452 Pipeline integrity management in high consequence areas.

(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:*

(6) Identification of preventive and mitigative measures to protect the high consequence area (see paragraph (i) of this section);

BPL has not documented a sufficiently detailed process that can be implemented for the identification of preventive and mitigative measures to protect the high consequence area. BPL needs to address documentation of that process.

20. § 195.452 Pipeline integrity management in high consequence areas.
- (i) *What preventive and mitigative measures must an operator take to protect the high consequence area?*
- (2) **Risk analysis criteria.** In identifying the need for additional preventive and mitigative measures, an operator must evaluate the likelihood of a pipeline release occurring and how a release could affect the high consequence area. This determination must consider all relevant risk factors, including, but not limited to:

BPL has not developed processes to evaluate the effects of potential actions on reducing the likelihood and consequences of pipeline releases. BPL needs to address documentation of those processes.

21. § 195.452 Pipeline integrity management in high consequence areas.
- (i) *What preventive and mitigative measures must an operator take to protect the high consequence area? —*

(1) **General requirements.** An operator must take measures to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area. These measures include conducting a risk analysis of the pipeline segment to identify additional actions to enhance public safety or environmental protection. Such actions may include, but are not limited to, implementing damage prevention best practices, better monitoring of cathodic protection where corrosion is a concern, establishing shorter inspection intervals, installing EFRDs on the pipeline segment, modifying the systems that monitor pressure and detect leaks, providing additional training to personnel on response procedures, conducting drills with local emergency responders and adopting other management controls.

BPL does not have a detailed process that ensures an adequate basis is established for guiding the selection of candidate P&M Measures to implement. BPL needs to address documentation of that process.

22. § 195.452 Pipeline integrity management in high consequence areas.
- (b) *What program and practices must operators use to manage pipeline integrity?* Each operator of a pipeline covered by this section must:
- (6) Follow recognized industry practices in carrying out this section, unless—
- (i) This section specifies otherwise; or
- (ii) The operator demonstrates that an alternative practice is supported by a reliable engineering evaluation and provides an equivalent level of public safety and environmental protection.

BPL has not developed a documented Quality Assurance/Quality Control (QA/QC) process to ensure timely and accurate incorporation of integrity data into the GIS. BPL needs to address that process.

23. § 195.452 Pipeline integrity management in high consequence areas.

(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:

(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);

BPL's justification for the risk factors included in the updated risk model presented at the time of the inspection is not documented in either the previous or the updated BPL IMP. BPL's justification for the basis of weighting risk model factors is not documented in the updated BPL IMP. BPL needs to address these justifications.

24. § 195.452 Pipeline integrity management in high consequence areas.

1) *What records must be kept?* (1) An operator must maintain for review during an inspection:

(i) A written integrity management program in accordance with paragraph (b) of this section.

(ii) Documents to support the decisions and analyses, including any modifications, justifications, variances, deviations and determinations made, and actions taken, to implement and evaluate each element of the integrity management program listed in paragraph (f) of this section.

(2) See Appendix C of this part for examples of records an operator would be required to keep

The BPL IM Plan does not specify that some key integrity management records be maintained. Examples of BPL records that are not specified for retention include: ILI records, dig and repair records, risk analysis results, or specific documentation that serves as the basis for technical decisions that could ultimately affect pipeline integrity. These key records need to be maintained.

25. § 195.452 Pipeline integrity management in high consequence areas.

(k) *What methods to measure program effectiveness must be used?* An operator's program must include methods to measure whether the program is effective in assessing and evaluating the integrity of each pipeline segment and in protecting the

high consequence areas. See Appendix C of this part for guidance on methods that can be used to evaluate a program's effectiveness.

BPL does not have adequate processes to track and evaluate performance measures in order to provide meaningful insight into integrity-related performance.

26. § 195.561 When must I inspect pipe coating used for external corrosion control?

(a) You must inspect all external pipe coating required by §195.557 just prior to lowering the pipe into the ditch or submerging the pipe.

(b) You must repair any coating damage discovered.

BPL MA procedure J.03, Coating, 3/2007, Paragraph 5 requires that all exposed pipe shall be visually inspected for damage prior to backfilling in accordance with MA Section J-04. BPL procedures do not specifically address how coating holidays will be repaired. No follow-up method is specified in the BPL procedure to ensure that the coating holidays are repaired.

27. § 195.567 Which pipelines must have test leads and what must I do to install and maintain the leads?

(a) *General.* Except for offshore pipelines, each buried or submerged pipeline or segment of pipeline under cathodic protection required by this subpart must have electrical test leads for external corrosion control. However, this requirement does not apply until December 27, 2004 to pipelines or pipeline segments on which test leads were not required by regulations in effect before January 28, 2002.

(b) *Installation.* You must install test leads as follows:

(1) Locate the leads at intervals frequent enough to obtain electrical measurements indicating the adequacy of cathodic protection.

BPL MA procedure J.02, External and Internal Corrosion Control, 4/2008, Section 1.6.1.1 states that for all pipelines that are cathodically protected, sufficient test stations or other contact points for electrical measurements are to be maintained to determine the adequacy of the cathodic protection. Those test stations are to be sufficiently spaced so as to determine if adequate protection exists. However, the procedure does not provide criteria stating how sufficient spacing can or will be determined. There is no mention that criteria on an individual case basis will be determined by Engineering or Corrosion Control Supervision.

28. § 195.573 What must I do to monitor external corrosion control?

(d) *Breakout tanks.* You must inspect each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that

operation and maintenance of the system are in accordance with API Recommended Practice 651. However, this inspection is not required if you note in the corrosion control procedures established under §195.402(c)(3) why compliance with all or certain operation and maintenance provisions of API Recommended Practice 651 is not necessary for the safety of the tank.

BPL MA procedure J-02, External and Internal Corrosion Control, 4/2008, does not include reference and commitment to the requirements of API 651 for the corrosion control protection of the bottom of aboveground breakout tanks as required by §195.573(d).

29. § 195.575 Which facilities must I electrically isolate and what inspections, tests, and safeguards are required?

(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.

BPL MA procedure J.02, External and Internal Corrosion Control, 4/2008, Section 9.3 states that electrical insulating devices such as insulating flange kits, insulating joints, insulating unions, insulating couplings, cathodic isolation kits in valve operators, casing insulators, etc. shall be installed and maintained to achieve the desired level of electrical isolation. This requirement should not state to achieve the desired level of electrical isolation. Rather, the requirement should be to achieve electrical isolation."

30. § 195.575 Which facilities must I electrically isolate and what inspections, tests, and safeguards are required?

(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.

BPL MA procedure J.02, External and Internal Corrosion Control, 4/2008, Section 9.5 notes that insulating devices which may arc are not to be installed in hazardous areas unless the devices are installed in an explosion-proof enclosure or other precautions are taken to prevent arcing. However, the methods used to define hazardous areas are not very specific, and should be improved or clarified.

31. § 195.579 What must I do to mitigate internal corrosion?

(a) General. If you transport any hazardous liquid or carbon dioxide that would corrode the pipeline, you must investigate the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline and take adequate steps to mitigate internal corrosion.

BPL MA procedure J-06, Internal Corrosion, 4/2008, Section 1.2 states that "Product specifications and connection requirements shall be such that non-corrosive or inhibited product is brought into the BPL system". Section 2 addresses procedures and processes to measure,

record, review and evaluate data related to corrosion coupons or failed pipe sections. The procedures also require BPL to review product received for proper specifications to ensure that non-corrosive or inhibited products are brought into the BPL system, and if required, to have product tested or remediated. However, the procedures do not specify remediation methods or how the potential internal corrosion is to be eliminated as a threat or concern.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. 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.

If, after opportunity for a hearing, your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.237). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

In correspondence concerning this matter, please refer to **CPF 1-2009-5001M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

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

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