



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

8701 South Gessner, Suite 1110
Houston, TX 77074

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

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 5, 2013

Mr. Troy Valenzuela
Vice President, Environmental, Health, & Safety
Plains Pipeline, L.P.
P.O. Box 4648
Houston, TX 77210-4648

CPF 4-2013-5007

Dear Mr. Valenzuela:

On various dates in 2011 and 2012, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected your Plains Pipeline, L.P., Cushing Terminal (Plains, the Operator) in Cushing, OK.

As a result of the inspection, 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 violation(s) are:

1. §195.205 Repair, alteration and reconstruction of aboveground breakout tanks that have been in service.

(a) Aboveground breakout tanks that have been repaired, altered, or reconstructed and returned to service must be capable of withstanding the internal pressure produced by the hazardous liquid to be stored therein and any anticipated external loads. (b) After October 2, 2000, compliance with paragraph (a) of this section requires the following for the tanks specified: (1) For tanks designed for approximately atmospheric pressure 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, repair, alteration, and reconstruction must be in accordance with API Standard 653.

Plains does not have complete documentation showing that all repairs recommended by the API 653 inspections were completed or alternatively if the Operator decided that certain recommended repairs were not necessary, the engineering justification for why the repairs were not made. In some cases the Operator has bid proposals from vendors and Authorization for Expenditure (AFE) documents, but these documents do not clearly show that the work was actually completed.

2. §195.402 Procedural manual for operations, maintenance, and emergencies.

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

Plains did not follow its procedure, P – 195.432(b), Inspection of In-Service Breakout Tanks, which according to Item 1m of its inspection procedure, in place at the time of the PHMSA inspection, required a security inspection as part of the monthly breakout tank inspection. However, the Plains monthly Tank Inspection record, Form 505, did not include any documentation that the security inspections had been performed. The Operator also did not have other records showing that the monthly security inspections had been performed.

3. §195.430 Firefighting equipment.

Each operator shall maintain adequate firefighting equipment at each pump station and breakout tank area. The equipment must be-

- (a) In proper operating condition at all times;**
- (b) Plainly marked so that its identity as firefighting equipment is clear; and,**
- (c) Located so that it is easily accessible during a fire.**

§195.10 Responsibility of operator for compliance with this part.

An operator may make arrangements with another person for the performance of any action required by this part. However, the operator is not thereby relieved from the responsibility for compliance with any requirement of this part.

Plains does not maintain adequate firefighting equipment at their Cushing Terminal but instead relies on the local public firefighting agency (Cushing Fire Department) and a volunteer alliance of area pipeline operators (Safety Alliance of Cushing, SAC) to provide equipment to satisfy this requirement. The Operator's policy allows employees to attempt to extinguish only small fires using small portable fire extinguishers but requires personnel to call on the local firefighting agency to respond to larger fires. But, Plains does not have adequate verification that the local public firefighting agency and SAC have adequate capability to respond to a fire at the Plains Cushing Terminal.

4. §195.432 Inspection of in-service breakout tanks.

(a) Except for breakout tanks inspected under paragraphs (b) and (c) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, inspect each in-service breakout tank.

(b) Each operator must inspect the physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to API Standard 653 (incorporated by reference, see § 195.3). However, if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under § 195.402(c)(3).

The breakout tank internal inspection intervals for thirty (30) tanks initially presented to PHMSA during the inspection were not correctly established according to the requirements of API Standard 653. For example, Plains records showed that tanks 2300, 2400, 2500, and 2600 were completed on July 1, 2002 and had an internal inspection interval established of fourteen (14) years. Plains did not have a similar service assessment performed according to Appendix H of API Standard 653 and did not have procedures for establishing the internal inspection intervals using a risk-based methodology according to paragraph 6.4.3 of API Standard 653. Consequently, the Operator was required to establish the internal inspection interval according to paragraph 6.4.2.2 of the version of API Standard 653 incorporated by reference, which states, "When corrosion rates are not known and similar service experience is not available to estimate the bottom plate minimum thickness at the next inspection, the internal inspection interval shall not exceed 10 years." This required internal inspections of the tanks with a construction date of July 1, 2002 to be completed by July 1, 2012. The internal inspection intervals for twenty six additional tanks (2700 through 5300) had similar issues and require initial internal inspections be performed by dates ranging from July 1, 2013 to April 7, 2020 depending on the construction date. Plains revised the inspection intervals and provided new data to PHMSA.

5. §195.563 Which pipelines must have cathodic protection?

(d) Bare pipelines, breakout tank areas, and buried pumping station piping must have cathodic protection in places where regulations in effect before January 28, 2002 required cathodic protection as a result of electrical inspections. See previous editions of this part in 49 CFR, parts 186 to 199.

§195.565 How do I install cathodic protection on breakout tanks?

After October 2, 2000, when you install cathodic protection under Sec. 195.563(a) to protect the bottom of an aboveground breakout tank of more than 500 barrels (79.5m³) capacity built to API Specification 12F, API Standard 620, or API Standard 650 (or its predecessor Standard 12C), you must install the system in accordance with API Recommended Practice 651. However, installation of the system need not comply with API Recommended Practice 651 on any tank for which you note in the corrosion control procedures established under Sec. 195.402(c)(3) why compliance with all or certain provisions of API Recommended Practice 651 is not necessary for the safety of the tank.

§195.553 What special definitions apply to this subpart?

Buried means covered or in contact with soil.

Plains did not maintain cathodic protection on at least sixteen (16) Cushing Terminal breakout tanks according to the requirements of 49 CFR 195.563(d) and 49 CFR 195.565, and did not have supporting documentation needed to adequately justify why compliance with the provisions of API 651 is not necessary for the safety of the tank. The Operator originally installed impressed current cathodic protection systems on breakout tanks in the Cushing Terminal at the time of construction. Consistent with the requirements of 49 CFR 195.563(d), the installation of impressed current cathodic protection systems on these tanks indicates that Plains had determined that cathodic protection of the tank bottoms was needed. At a later date, Plains discontinued the cathodic protection and instead implemented the use of Vapor Phase Corrosion Inhibitor but did not provide supporting documentation justifying these actions.

6. §195.571 What criteria must I use to determine the adequacy of cathodic protection?

Cathodic protection required by this Subpart must comply with one or more of the applicable criteria and other considerations for cathodic protection contained in paragraphs 6.2 and 6.3 of NACE SP 0169 (incorporated by reference, see § 195.3).

§195.565 How do I install cathodic protection on breakout tanks?

After October 2, 2000, when you install cathodic protection under Sec. 195.563(a) to protect the bottom of an aboveground breakout tank of more than 500 barrels (79.5m³) capacity built to API Specification 12F, API Standard 620, or API Standard 650 (or its predecessor Standard 12C), you must install the system in accordance with API Recommended Practice 651. However, installation of the system need not comply with API Recommended Practice 651 on any tank for which you note in the corrosion control procedures established under Sec. 195.402(c)(3) why compliance with all or certain provisions of API Recommended Practice 651 is not necessary for the safety of the tank.

Plains did not meet one or more of the applicable criteria for cathodic protection on twenty seven (27) breakout tanks in the Cushing Terminal as required by 49 CFR 195.571 and 49 CFR 195.565. For example, the annual 2010 and 2011 reference cells survey shows that there was no cathodic protection on tank 1800. Another example is on tank 2000 where one of the year 2011 energized readings was -0.657 mV and the IR free reading was -0.483 mV. The Operator has a note that the 100 mV criterion was used, but there was not adequate information (native potential) on the Operator's record to determine if the 100 mV criterion was met. Other examples where at least one of the reference cells during the 2011 survey were not meeting one of the criteria include tanks 1900, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800 3900, 4000, 4300, 4400, 5000, and 5300.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$100,000 for each violation for each day the violation persists up to a maximum of \$1,000,000 for any related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of \$103,400 as follows:

Item number

PENALTY

5	\$32,800
6	\$70,600

Warning Items

With respect to item(s) 1 through 4, 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 these item(s). Be advised that failure to do so may result in Plains being subject to additional enforcement action.

Proposed Compliance Order

With respect to item(s) 5 and 6 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Plains. 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.

In your correspondence on this matter, please refer to **CPF 4-2013-5007** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



R. M. Seeley
Director, Southwest 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 Plains a Compliance Order incorporating the following remedial requirements to ensure the compliance of Plains with the pipeline safety regulations:

1. In regard to Item Number 5 of the Notice pertaining to Plains failing to install cathodic protection on some of its breakout tanks, the Operator must install cathodic protection to protect the bottom of each unprotected breakout tank as required by the applicable provisions in 49 CFR 195. Volatile Corrosion Inhibitor (VCI) may be used in conjunction with cathodic protection but cannot be used as a substitute for a cathodic protection system.
2. In regard to Item Number 6 of the Notice pertaining to failing to achieve adequate cathodic protection on some of the breakout tanks in the Cushing Terminal, Plains must take appropriate actions to remedy all cathodic protection deficiencies and show by structure-to-soil measurements that one or more of the cathodic protection criteria listed in NACE SP0169 or API RP651 has been achieved.
3. In regard to Item Number 5 of the Notice, Plains must submit, for PHMSA approval, a plan to install cathodic protection on each unprotected breakout tank within 30 days of receipt of this Order. The Operator must then complete installation of the cathodic protection systems within 1 year of receiving PHMSA approval for the plan. In regard to Item Number 6 of the Notice, Plains must submit to PHMSA within 1 year, structure-to-soil readings for every tank in the Cushing Terminal that show that at least one of the cathodic protection criteria required by 49 CFR 195 has been met.
4. It is requested (not mandated) that Plains maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to R. M. Seeley, Director, Southwest 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.