



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

8701 South Gessner, Suite 1110
Houston, TX 77074

NOTICE OF AMENDMENT

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 4-2013-5008M

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 Plains Pipeline Company (Plains) procedures for your breakout tank facilities in Cushing, OK.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within the Plains plans or procedures, as described below:

1. 195.132 Aboveground breakout tank.

(a) Each aboveground breakout tank must be designed and constructed to withstand the internal pressure produced by the hazardous liquid to be stored therein and any anticipated external loads.

(b) For aboveground breakout tank first placed in service after October 2, 2000, compliance with paragraph (a) of this section requires one of the following:

(3) Vertical, cylindrical, welded steel tanks with internal pressures at the tank top approximating atmospheric pressures (i.e., internal vapor space pressures not greater than 2.5 psig (17.2 kPa), or not greater than the pressure developed by the weight of the tank roof) must be designed and constructed in accordance with API Standard 650.

The Plains procedure, Storage Tanks, New Construction (API 650), paragraph 1.1 states that the latest edition of API 650 will be used rather than the version incorporated by reference into Part 195. The Operator must revise its procedures to require that the version incorporated by reference into Part 195 will be used.

2. 195.205 Repair, alteration and reconstruction of aboveground breakout tanks that have been in service.

(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.

The Plains procedure, P – 195.205(b)(1), Alteration & Reconstruction of Aboveground Breakout Tanks - API 653, Appendix C, Reference section, does not specify the version of the API Standard 653 that must be used. Plains must revise its procedures to specify that the version of API 653 incorporated by reference into Part 195 will be used.

3. 195.264 Impoundment, protection against entry, normal/emergency venting or pressure/vacuum relief for aboveground breakout tanks.

(a) A means must be provided for containing hazardous liquids in the event of spillage or failure of an aboveground breakout tanks.

(b) After October 2, 2000, compliance with paragraph (a) of this section requires the following for the aboveground breakout tanks specified:

(1) For tanks built to API Specification 12F, API Standard 620, and others (such as API Standard 650 or its predecessor Standard 12C), the installation of impoundment must be in accordance with the following sections of NFPA 30:

(i) Impoundment around a breakout tank must be installed in accordance with section 4.3.2.3.2; and

(ii) Impoundment by drainage to a remote impounding area must be installed in accordance with section 4.3.2.3.1.

The Plains procedure, P – 195.264(b)(1), Impoundment of Breakout Tanks, Appendix C, Regulatory Requirements section, does not specify the correct references to the paragraphs in NFPA 30, incorporated by reference into Part 195. The references are to an earlier version of NFPA 30. Plains must revise its procedures to specify the correct paragraphs in the version of NFPA 30 incorporated by reference into Part 195.

4. 195.264 Impoundment, protection against entry, normal/emergency venting or pressure/vacuum relief for aboveground breakout tanks.

(c) Aboveground breakout tanks areas must be adequately protected against unauthorized entry.

The Plains procedure, P – 195.264(c), Protection of Breakout Tank From Unauthorized Entry, Appendix C, Regulatory Requirement section, does not specify the security measures that the Operator employs or how these measures will be consistently applied to the Plains pipeline facilities. The procedure simply repeats the regulation. However, the Operator has a Site Security Plan that includes fencing and inspection requirements. Plains must revise its procedure to reference the Site Security Plan or include more detailed treatment of security requirements in Plains procedure P – 195.264(c).

5. 195.264 Impoundment, protection against entry, normal/emergency venting or pressure/vacuum relief for aboveground breakout tanks.

(e) For normal/emergency relief venting and pressure/vacuum-relieving devices installed on aboveground breakout tanks after October 2, 2000, compliance with paragraph (d) of this section requires the following for the tanks specified:

(1) Normal/emergency relief venting installed on atmospheric pressure tanks built to API Specification 12F (incorporated by reference, see § 195.3) must be in accordance with Section 4, and Appendices B and C, of API Specification 12F (incorporated by reference, see § 195.3).

(2) Normal/emergency relief venting installed on atmospheric pressure tanks (such as those built to API Standard 650 or its predecessor Standard 12C) must be in accordance with API Standard 2000 (incorporated by reference, see § 195.3).

(3) Pressure-relieving and emergency vacuum-relieving devices installed on low pressure tanks built to API Standard 620 (incorporated by reference, see § 195.3) must be in accordance with section 9 of API Standard 620 (incorporated by reference, see § 195.3) and its references to the normal and emergency venting requirements in API Standard 2000 (incorporated by reference, see § 195.3).

The Plains procedure, P – 195.264(e)(2), Normal and Emergency Venting, Appendix C, Reference section, does not specify the version of the API Standard 2000 that must be used. Plains must revise its procedures to specify that the version of API 2000 incorporated by reference into Part 195 will be used.

6. 195.307 Pressure testing aboveground breakout tanks.

(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 12.3 of API Standard 653.

The Plains procedure, P – 195.307(d), Hydrostatic & Pneumatic Testing of Breakout Tank (Return To Service), Appendix C, Regulatory Requirement section, does not refer to the correct paragraph in API

Standard 653 for coverage of this topic. The reference to paragraph 10.3 is for an earlier version of API 653 and is not correct for the version incorporated by reference into Part 195. The reference should be to paragraph 12.3. Plains must revise its procedures to refer to the correct paragraph in the version of API 653 incorporated by reference into Part 195.

7. 195.307 Pressure testing aboveground breakout tanks.

(c) For aboveground breakout tanks built to API Standard 650 (incorporated by reference, see § 195.3 and first placed in service after October 2, 2000, testing must be in accordance with Section 7.3 of API Standard 650 (incorporated by reference, see § 195.3).

(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 12.3 of API Standard 653.

Plains procedures, P-195.307(c), Hydrostatic and Pneumatic Testing of Breakout Tank (First Service), and P – 195.307(d), Hydrostatic & Pneumatic Testing of Breakout Tank (Return To Service), Appendix C, Regulatory Requirement sections, do not specify the records that are required to be retained for hydrostatic and pneumatic testing of breakout tanks. Plains must revise its procedures to specify the records that must be retained for the life of the facility to show that a breakout tank was properly tested as required by API Standard 650 and API Standard 653.

8. 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.

The Plains procedures, P-195.405(a), Protection Against Tank Ignitions, Appendix C, Reference section, does not specify the version of API 2003, “Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents,” that must be used. Plains must revise its procedures to specify the version of API 2003 incorporated by reference into Part 195.

9. 195.405 Protection against ignitions and safe access/egress involving floating roofs.

(b) The hazards associated with access/egress onto floating roofs of in-service aboveground breakout tanks to perform inspection, service, maintenance or repair activities (other than specified general considerations, specified routine tasks or entering tanks removed from service for cleaning) are addressed in API Publication 2026. After October 2, 2000, the operator must review and consider the potentially hazardous conditions, safety practices and procedures in API Publication 2026 for inclusion in the procedure manual (§195.402(c)).

The Plains procedures, P-195.405(b), Safe Access & Egress for Floating Roof Tanks, Appendix C, Reference section, does not specify the version of API 2026, “Safe Access/Egress Involving Floating Roof of Storage Tanks in Petroleum Service,” that must be used. Plains must revise its procedures to specify the version of API 2026 incorporated by reference into Part 195.

10. 195.432 Inspection of in-service breakout tanks.

(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 Plains procedure, P-195.432(b), Inspection of In-Service Breakout Tanks, Appendix C, Frequency section, does not correctly establish the frequency of external or ultrasonic inspections as required by API Standard 653. The procedure also does not adequately cover the requirements for establishing internal inspection intervals. Plains must modify its procedure to correctly specify the external and internal inspection intervals or refer to the appropriate sections of API Standard 653.

11. 195.432 Inspection of in-service breakout tanks.

(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).

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.

At the time of the inspection, the Plains procedure, P-195.432(b), Inspection of In-Service Breakout Tanks, Appendix C, Procedure Steps section, Item 1m., requires a monthly inspection of security measures. However, the Plains monthly Tank Inspection record, Form 505, did not include any documentation that the security measures were inspected. Plains must modify Form 505 to include documentation of the monthly security inspection required by its procedure or separate the security inspections from the monthly breakout tank inspection procedure.

12. 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.

The Plains procedure, Corrosion Control, Breakout Tanks section pertaining to 195.565, does not specify the version of the API RP 651 that must be used. Plains must revise its procedures to specify that the version of API 651 incorporated by reference into Part 195 will be used. The revered Plains specification 719, Cathodic Protection System for Aboveground Storage Tanks with Claymax Liner or Without Liner, must also be revised to specify the version of API RP 651 incorporated by reference into Part 195.

**13. 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.**

The Plains procedure, Cathodic Protection System for Aboveground Storage Tanks with Claymax Liner or without Liner, section 9.0, Compliance Criteria, page 12 of 13, states the cathodic protection criteria for tank bottoms to be either an “Instant Off” potential of -850 millivolts or more negative, or achieved polarization greater than 100 millivolts. The Plains procedure O&M – 412, Operations & Maintenance Procedures Manual, Corrosion Control, page 6 of 14, states that the cathodic protection criteria for breakout tanks to be a negative tank-to-soil voltage of at least 0.85 volt (-0.85v) with cathodic protection current applied or a minimum negative polarization voltage shift of 100 millivolts. Plains must reconcile the inconsistency between the two procedures related to the -850 millivolt criteria by either allowing both criteria or specifying the same -850 millivolt criterion in both procedures. If Plains intends to allow the use of the -850 millivolt with cathodic protection current applied as one of the criteria to determine the adequacy of the cathodic protection, then it must correctly state the criteria by including the provision that IR drop must be considered in determining the adequacy of the reading.

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 60 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.

It is requested (not mandated) that Plains maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to R. M. Seeley, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 4-2013-5008M** 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

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