



of Transportation

Pipeline and Hazardous **Materials Safety** Administration

AUG 0 1 2013

Mr. Michael A. Creel, CEO Enterprise Products Partners, LP 1100 Louisiana Street Houston, TX 77002

Re: CPF No. 4-2012-5008M

Dear Mr. Creel:

Enclosed please find the Order Directing Amendment issued in the above-referenced case. It makes findings of inadequate procedures and requires that Enterprise Crude Pipelines, LLC, amend certain of its operating and maintenance procedures. When the amendment of procedures has been completed, as determined by the Director, Southwest Region, this enforcement action will be closed. Service of the Order Directing Amendment by certified mail is deemed effective upon the date of mailing, or as otherwise provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Jeffrey D. Wiese Associate Administrator for Pipeline Safety

Enclosure

Mr. Rodrick M. Seeley, Southwest Region Director, OPS cc:

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION OFFICE OF PIPELINE SAFETY WASHINGTON, D.C. 20590

In the Matter of)	
Enterprise Crude Pipelines, LLC, a subsidiary of Enterprise Products Partners, LP,)))	CPF No. 4-2012-5008M
Respondent.)	

ORDER DIRECTING AMENDMENT

On April 11-15, 2011, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of Enterprise Crude Pipelines, LLC, (Enterprise or Respondent) in Cushing, Oklahoma. Enterprise is a subsidiary of Enterprise Products Partners, LP, which operates 50,700 miles of natural gas, natural gas liquid crude oil, refined products and petrochemical pipelines.¹

As a result of the inspection, the Director, Southwest Region, OPS (Director), issued to Respondent, by letter dated March 12, 2012, a Notice of Amendment (NOA). The Notice alleged certain inadequacies in Enterprise's plans or procedures and proposed, in accordance with 49 C.F.R. § 190.237, requiring Respondent to amend its procedures.

On May 18, 2012, Enterprise responded to Items 1 through 7 of the NOA (Response). Respondent also requested an extension until November 18, 2012, to respond completely to Item 4 of the Notice. PHMSA granted an extension until August 20, 2012, for Enterprise to complete the response. A meeting was held with representatives of Enterprise, at which Enterprise agreed to make additional revisions to its procedures. By letter dated August 20, 2012, Enterprise timely submitted a revised response (Supplemental Response).

FINDINGS OF INADEQUATE PROCEDURES

The Notice alleged certain inadequacies in Respondent's procedures. Respondent did not contest the allegations but submitted amended procedures to address the inadequacies. I have reviewed the revised procedures and considered the following factors: relevant available pipeline safety

¹ Enterprise Products Partners, LP, available at http://www.enterpriseproducts.com/corpProfile/businessProfile.shtm (last accessed May 6, 2013).

data; whether the plans are adequate for Enterprise's unique facilities and in their particular locations; the reasonableness of the procedures; and the extent to which the procedures contribute to public safety. Upon such review of the revised procedures under 49 C.F.R. § 190.237, I find as follows:

Item 1: The Notice alleged that Respondent's procedures were inadequate to ensure safe operation of its pipeline facilities by failing to develop procedures addressing 49 C.F.R. § 195.132, which states:

§ 195.132 Design and construction of aboveground breakout tanks.

- (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 tanks first placed in service after October 2, 2000, compliance with paragraph (a) of this section requires one of the following:
- (1) Shop-fabricated, vertical, cylindrical, closed top, welded steel tanks with nominal capacities of 90 to 750 barrels (14.3 to 119.2 m³) and with internal vapor space pressures that are approximately atmospheric must be designed and constructed in accordance with API Specification 12F.
- (2) Welded, low-pressure (i.e., internal vapor space pressure not greater than 15 psig (103.4 kPa)), carbon steel tanks that have wall shapes that can be generated by a single vertical axis of revolution must be designed and constructed in accordance with API Standard 620.
- (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.
- (4) High pressure steel tanks (i.e., internal gas or vapor space pressures greater than 15 psig (103.4 kPa)) with a nominal capacity of 2000 gallons (7571 liters) or more of liquefied petroleum gas (LPG) must be designed and constructed in accordance with API Standard 2510.

The Notice alleged that Enterprise's procedures were inadequate with respect to 49 C.F.R. § 195.132. Specifically, it alleged that Respondent's Williams Energy Services, ES-3610, Atmospheric Steel Tanks Procedure and its Duke Energy Field Services, LPG Truck Terminal – Design and Installation Procedure did not specify the appropriate version of the API standards that have been incorporated by reference into the regulation. Additionally, its EGS E-6300, Storage Tank Guideline & Specification Procedure may conflict with the Williams Energy Service ES-3610 Procedure and the requirements of API 650 due to its included exceptions, substitutions, modifications, and additions.

In its Response, Enterprise stated that its Williams Energy Services ES-3610, Duke Energy Field Services, LPG Truck Terminal – Design and Installation, and EGS E-6300 Storage Tank

Guideline & Specification procedures had been archived and that it had consolidated and developed a new set of procedures, STD.5600, Welded Tanks for Oil Storage, which defined the minimum requirements for the design, materials, construction, and inspection of aboveground storage tanks per API 650 Welded Tanks for Oil Storage, 11th Edition, Addendum 1.

However, *Paragraph 5.8.5.3* of *STD.5600* still does not mandate that emergency venting for PHMSA-regulated breakout tanks constructed to API Standard 650 must be done in accordance with the requirements of API Standard 2000.² Since the procedure does not reference API Standard 2000, Respondent's *STD.5600* procedure for emergency venting of PHMSA-regulated breakout tanks is inadequate to ensure that it is done in accordance with API Standard 2000.

Accordingly, I find that Respondent's procedures for design and construction of aboveground breakout tanks are inadequate to ensure safe operation of its pipeline system. Respondent must amend its *STD.5600* procedure to require that the emergency venting for PHMSA-regulated breakout tanks constructed to API Standard 650 must be done in accordance with the requirements of API Standard 2000.

Item 2: The Notice alleged that Respondent's procedures were inadequate to ensure safe operation of its pipeline facilities by failing to develop procedures addressing 49 C.F.R. § 195.205, which states:

§ 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.
- (2) For tanks built to API Specification 12F or API Standard 620, the repair, alteration, and reconstruction must be in accordance with the design, welding, examination, and material requirements of those respective standards.
- (3) For high pressure tanks built to API Standard 2510, repairs, alterations, and reconstruction must be in accordance with API 510.

The Notice alleged that Respondent's procedures were inadequate with respect to § 195.205 in

² Paragraph 5.8.5.3. of Respondent's *STD.5600* states: "Emergency venting requirements are satisfied if the tank is equipped with a weak roof-to-shell attachment (frangible joint) in accordance with 5.10.2.6 or if the tank is equipped with pressure relief devices meeting the requirements specified in API Standard 2000 for emergency venting."

several respects. First, it alleged that the company's procedure *EGS E-6320* presented certain exceptions, substitutions, and modifications to the requirements of API 653 and referenced an incorrect version of API 653 (API 653, Second Edition, December 1995). Second, the document allegedly did not provide any engineering justification for the exceptions and modifications, so it was not clear whether an equivalent level of safety had been achieved.

Third, it alleged that in addition to EGS E-6320, Enterprise presented a new procedure, STD.9503, DOT Breakout Tank Integrity Testing, Revision No. 0.0. that at the time of the inspection had not been implemented but failed to specify the correct version of the referenced API 653. A version of Section 8.2, External Inspection Frequency, presented after the inspection states: "As an alternative, an owner/operator may establish the external inspection interval using risk-based inspection (RBI) procedures in accordance with API 653, 580, and 581. According to API 653, Appendix E – Technical Inquiries, Question 653-I-02/03, 'RBI can be applied to internal inspection intervals only." Finally, Section 8.4 presents a table of internal inspection intervals. This table is from a more recent version of API 653 not incorporated by reference into Part 195.

In its Response, Enterprise stated that its procedure EGS E-6320 had been archived and replaced by STD.9503, Inspection and Testing of Atmospheric and Low-Pressure DOT Breakout Tanks, Revision 4.0, April 2012. Enterprise addressed the issue about STD.9503 by stating, "Enterprise procedure, STD.9503, Inspection and Testing of Atmospheric and Low Pressure Breakout Tanks, Section 8.4, provides guidance on RBI for internal inspection only and does not utilize RBI for external inspection purposes." Additionally, the Response stated that the table the Notice referenced as part of EGS E-6320 had now been archived.

Since EGS E-6320 has been archived, the issue of an engineering justification for the exceptions and modifications in the document is moot. It appears that the revision that was submitted for STD.9503 addresses the issue that was noted in the inspection that RBI could only be applied to internal inspection intervals.

Although Enterprise responded that it had archived the table that was part of EGS E-6320, the Notice was referring to the table found in Section 8.4 of STD.9503. Enterprise removed the table from the revision of STD.9503 that was submitted in its Response but the remaining procedure still does not adequately describe the methodologies used by the operator to determine the internal inspection intervals for its breakout tanks. Additionally, the paragraph on risk-based inspections does not adequately explain how Enterprise is employing this methodology to determine internal inspection intervals, including when this methodology will be employed, the algorithm, the factors considered, the weighting, how the floor corrosion rates are determined, the minimum thickness of the floor plates, whether a stress analysis must be performed, etc.

In addition, STD.9503 refers to a checklist in Appendix A, paragraph 8.1, Periodic Monthly Inspections, but the checklist does not address problems with the concrete ringwall, such as those addressed in C.1.1.1 of the Tank In-Service Checklist in API Standard 653. The presence of standing water may not be the only indication of drainage problems that should be identified by the routine in-service inspection included under C.1.1.1 and C.1.1.5. The STD.9503 Appendix A checklist also does not require inspection for pain failures, pitting, and corrosion, manifold

piping, fire suppression components, or buildup of vegetation and evidence of settlement.

Accordingly, I find that Respondent's procedures providing for the repair, alteration and reconstruction of aboveground breakout tanks that have been returned to service are inadequate to ensure safe operation of its pipeline system.

Respondent must revise STD.9503, Inspection and Testing of Atmospheric and Low-Pressure DOT Breakout Tanks, to specify the procedures that will be used to determine the internal inspection intervals for breakout tanks, the criteria for determining the methodology that will be used, how a change of methodology will be done, and procedures for performing similar service assessments. Enterprise must also specify its procedures for using the risk-based methodology described in API Standard 653, Paragraph 6.4.3, including, but not limited to: the specific risk factors that must be evaluated; the risk algorithm; the weighting of the factors; how the floor corrosion rate will be determined; the minimum allowable thickness of the floor plates; whether a stress analysis must be performed; the positions responsible for administering, reviewing, and approving the risk-based program; and the required qualifications for persons administering, reviewing, and approving the risk-based program. Enterprise must also modify its procedures to address all of the items that need to be inspected during routine in-service inspections and must develop procedures that ensure accurate determination of the shell corrosion rate.

Item 3: The Notice alleged that Respondent's procedures were inadequate to ensure safe operation of its pipeline facilities by failing to develop procedures addressing 49 C.F.R. § 195.264, which states, in relevant part:

§ 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 tank.
- (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.
- (2) For tanks built to API 2510, the installation of impoundment must be in accordance with section 5 or 11 of API 2510 (incorporated by reference, see § 195.3).
- (c) Aboveground breakout tank areas must be adequately protected against unauthorized entry. . . .

The Notice alleged that Respondent's procedures were inadequate with respect to § 195.264(b)

and (c). Specifically, it alleged that various Enterprise procedures did not refer to the correct version of the standards incorporated by reference into § 195.264(b). For example, ES-3610, Atmospheric Steel Tanks, did not require that the company's impoundment procedures comply with the requirements of the correct version of NFPA 30. As for 195.264(c), Enterprise security procedure, Procedures Manual for Hazardous Liquids Pipeline Operations, Maintenance, and Emergencies, Security, Section 1309 does not require adequate protection against unauthorized entry.

In its Response, to address the issues pertaining to § 195.264(b), Enterprise stated that procedures ES-3610, Atmospheric Steel Tanks, EGS E-6302, Storage Tank Guidelines & Specifications, and ES E-3610, Storage Tank Guidelines & Specifications have been archived and replaced with STD.5602, Tank Farm Design. Enterprise also revised STD.5602 to specify the version of NFPA 30, the Flammable and Combustible Liquids Code, incorporated by reference into Part 195, and eliminated the incorrect paragraph references. Per the requirements of § 195.264(c), Enterprise revised the Procedures Manual for Hazardous Liquids Pipeline Operations, Maintenance, and Emergencies, Section 1309 – Security, to address protection from vandalism and unauthorized entry in breakout tank areas. Enterprise's adoption of STD. 5602 response addresses the issues pertaining to ES-3610 and EGS E-3610 by consolidating the confusing array of overlapping procedures intended to address the requirements of 195.264(b) and (c). However, STD. 5602 makes no reference to the site drainage requirements in API Standards 650 and 653. Additionally, Enterprise partially addressed the issue of security measures provided against unauthorized entry by revising the Procedures Manual for Hazardous Liquids Pipeline Operations, Maintenance and Emergencies, Section 1309 - Security. The additional concerns were addressed as part of Item 7. Accordingly, I find that some of Enterprise's procedures for impoundment, protection against entry, normal/emergency venting or pressure/vacuum relief for aboveground breakout tanks remain inadequate to ensure safe operation of its pipeline system. Enterprise must revise STD.5602 to include the design requirements for breakout tank site drainage requirements of API Standards 650 and 653.

Item 4: The Notice alleged that Respondent's procedures were inadequate to ensure safe operation of its pipeline facilities by failing to develop procedures addressing 49 C.F.R. § 195.307, which states:

§ 195.307 Pressure testing aboveground breakout tanks.

- (a) For aboveground breakout tanks built into 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 (incorporated by reference, *see* § 195.3).
- (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 (incorporated by reference, see § 195.3) and first placed in service after October 2, 2000, testing must be in accordance with Section 5.2 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 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.

The Notice alleged that Respondent's procedures were inadequate with respect to five separate provisions of § 195.307. First, the Notice alleged that the Enterprise procedure for testing API 12F and 12D tanks, Williams Energy Services procedure ES-3610, Atmospheric Steel Tanks, Section 6, Testing and Inspections, required a pressurized air test but did not state that testing would be done in accordance with Section 5.3 of API 12F, as required by § 195.307(a). Second, it alleged that the same Enterprise procedure for testing API 620 tanks, required a hydrostatic test but did not state that the testing would be performed in accordance with Section 7.18 of API 620, as required by § 195.307(b). Third, it alleged that the same Enterprise procedures for testing API 650 tanks and E-6320, Section 10.3, Tank Inspection Repair, Alteration, and Reconstruction, required a hydrostatic test but did not state that the testing would be performed in accordance with Section 5.3 of API 650, as required by § 195.307(c). Fourth, it alleged that Enterprise procedure E-6320, Section 10.3, Tank Inspection, Repair, Alteration and Reconstruction required a hydrostatic test but did not state that the testing would be done in accordance with Section 12.3 of API 653, as required by § 195.307(d). Fifth, it alleged that Respondent did not present a procedure that testing for an API 2510 tank would be done according to the ASME Boiler and Pressure Vessel Code, as required by § 195.307(e).

In its Response, Enterprise stated that it had developed a new set of procedures to address the inadequacies cited in the Notice. First, it provided a copy of its new procedure, STD.5607, Specification for Shop Welded Tanks for Storage of Production Liquids, which purported to include a reference to Section 5.3 of API 12F, in accordance with 195.307(a). Second, it provided a new procedure, STD.5608, Design and Construction of Large, Welded, Low-Pressure Storage Tanks, which included a reference to Section 7.18 of API 620, in accordance with § 195.307(b). Third, it provided a new consolidated procedure, STD.5600, Welded Tanks for Oil Storage, which included a reference to Section 5.2 of API 650, in accordance with § 195.307(c). Fourth, Enterprise contended that STD.5605, Tank Inspection, Repair, Alteration, and Reconstruction, included a reference to section 12.3 of API 653, that met the requirements of § 195.307(d). Fifth, it provided a new procedure, STD.5004, Design and Construction of Liquefied Petroleum Gas Installation, which purported to include a reference to API 2510, in accordance with § 195.307(e).

Enterprise's responses pertaining to *STD.5600* and *STD.5608* adequately address the issues in items 2 and 3 above. Accordingly, I find that some of Enterprise's procedures for pressure testing aboveground breakout tanks are inadequate to ensure safe operation of its pipeline system.

Respondent must make revisions to *STD.5607* to specify that aboveground tanks built to API Specification 12F must be tested in accordance with Section 5.3 of the standard. Respondent must modify *STD.5605* to specifically require that hydrostatic testing for tanks repaired, altered, or reconstructed be done according to the requirements of API Standard 653 as well as the additional Enterprise requirements specified in this procedure. Respondent must specify in its *STD.5004* that pressure testing for API Standard 2510 vessels should be done according to the requirements of Section VIII of the ASME Boiler and Pressure Vessel Code, as required under § 195.307(e).

Item 5: The Notice alleged that Respondent's procedures were inadequate to ensure safe operation of its pipeline facilities by failing to develop procedures addressing 49 C.F.R. § 195.310, which states:

§ 195.310 Records.

- (a) A record must be made of each pressure test required by this subpart, and the record of the latest test must be retained as long as the facility tested is in use.
 - (b) The record required by paragraph (a) of this section must include:
 - (1) The pressure recording charts;
 - (2) Test instrument calibration data;
- (3) The name of the operator, the name of the person responsible for making the test, and the name of the test company used, if any;
 - (4) The date and time of the test;
 - (5) The minimum test pressure;
 - (6) The test medium;
 - (7) A description of the facility tested and the test apparatus;
- (8) An explanation of any pressure discontinuities, including test failures, that appear on the pressure recording charts;
- (9) Where elevation differences in the section under test exceed 100 feet, a profile of the pipeline that shows the elevation and test sites over the entire length of the test section; and
 - (10) Temperature of the test medium or pipe during the test period.

The Notice alleged that Respondent's procedures were inadequate with respect to 49 C.F.R. § 195.310 because the company's Williams Energy Services Procedure ES-3610, Atmospheric Steel Tanks did not specify retention requirements for hydrostatic testing records. In addition, it alleged that Enterprise's Procedure, E-6320, Tank Inspection Repair, Alteration, and Reconstruction required the maintenance of test records but was not adequately specific as to the documentation requirements. The specific records listed in § 195.310(b) apply to all pressure tests but Enterprise's tank inspection procedures fail to include adequate documentation and retention requirements for tank testing records.

In its Response, Enterprise stated that "the Williams Energy Services procedure, ES-3610, Atmospheric Steel Tanks and the EPCO, Inc., procedure EGS E-6302, Storage Tank Guidelines & Specifications have been archived. STD.0250, Project Records Management has been

developed. Appendix A of this procedure specifies the hydrostatic testing records required for retention in accordance with § 195.301(b)."

I have reviewed Respondent's revised procedures but find they are still inadequate. Appendix A, Project Records Index, shows one entry titled "Pressure Testing – Aboveground Breakout Tanks," but it does not specify the records that must be maintained. Accordingly, I find that Respondent's procedures for records retention under 49 C.F.R. § 195.310 are inadequate to ensure safe operation of its pipeline system. Enterprise must revise STD.0250 to specify that the documentation and records retention requirements of § 195.310 apply to hydrostatic testing records for breakout tanks.

Item 6: The Notice alleged that Respondent's procedures were inadequate to ensure safe operation of its pipeline facilities by failing to develop procedures addressing 49 C.F.R. § 195.405, which states:

§ 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.
- (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 Notice alleged that Respondent's procedures were inadequate with respect to 49 C.F.R. § 195.405(a) and (b). First, the Notice alleged that Enterprise was unable to provide a procedure stating how the requirements of § 195.405(a) would be met and no reference to API RP 2003 was found in the Enterprise procedures. (API RP 2003 is referenced by API 653 but compliance with API RP 2003 should be specifically required by Respondent's breakout tank procedures.) Second, it alleged that Enterprise had no procedures stating how the requirements of § 195.405(b) would be met, nor was there any reference to API RP 2026 in the company's procedures.

In its Supplemental Response, Enterprise stated that "Enterprise Procedures Manual for Hazardous Liquids Pipeline Operations, Maintenance and Emergencies, Section 1307 – Breakout Tanks, references both API RP 2026 and API RP 2003." The company contended that its procedures stated that Enterprise would take into consideration the potential hazards, safety

practices and procedures outlined in API RP 2026 and protect against ignitions in accordance with API RP 2003.

Procedure 1307, however, was not presented to PHMSA during the inspection. Additionally, Enterprise's procedure STD.5600, Welded Tanks for Oil Storage, or STD.9503, Inspection and Testing of Atmospheric and Low-Pressure DOT Breakout Tanks, does not refer to either API RP 2026 or AP RP 2003, and there is no cross-reference to Procedure 1307. Without any sort of cross-reference between the two procedures, it is unlikely that an Enterprise employee would know that these additional breakout tank requirements were included in the company's operations and maintenance procedures.

Accordingly, I find that Respondent's procedures for protection against ignitions and safe access/egress involving floating roofs are inadequate to ensure safe operation of its pipeline system. Enterprise must modify all applicable procedures, including STD.5600 and STD.9503 to reference Section 1307 – Breakout Tanks of Enterprise's Procedures Manual for Hazardous Liquids Pipeline Operations, Maintenance and Emergencies and to reference the need to comply with the requirements of § 195.405(a) and (b).

Item 7: The Notice alleged that Respondent's procedures were inadequate to ensure safe operation of its pipeline facilities by failing to develop procedures addressing 49 C.F.R. § 195.436, which states:

§ 195.436 Security of facilities.

Each operator shall provide protection for each pumping station and breakout tank area and other exposed facility (such as scraper traps) from vandalism and unauthorized entry.

The Notice alleged that Respondent's procedures were inadequate with respect to 49 C.F.R. § 195.436, insofar as Enterprise's procedural manual, *Procedures Manual for Hazardous Liquids Pipeline Operations, Maintenance, and Emergencies, Security, Section 1309*, did not require protection of company facilities from vandalism and unauthorized entry or indicate how such protection would be provided.

In its Supplemental Response, Respondent stated, "Enterprise's Procedures Manual for *Hazardous Liquids Pipeline Operations, Maintenance, and Emergencies, Section 1309 – Security*, was revised to address protection from vandalism and unauthorized entry per the requirements of § 195.436."

I have reviewed Enterprise's revised procedures, but they still do not specify the criteria used to determine when a valve must be fenced or when chaining alone is deemed sufficient. The procedure also does not specify the company's criteria for determining when a pump station, terminal, or breakout tank area will be manned. Accordingly, I find that Respondent's procedures for the security of its facilities under 49 C.F.R. § 195.436 are inadequate to ensure safe operation of its pipeline system. Respondent must revise Section 1309 to specify the potential security measures employed by Enterprise, the criteria used to determine appropriate security measures, the positions responsible for implementing security measures, and security

inspection requirements.

For the reasons discussed above in Items 1-7, I find that Enterprise's procedures are inadequate to assure safe operations. Pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237, Respondent is ordered to:

- 1. Submit revised procedures pursuant to Items 1 through 7 above, within 45 days following receipt of this Order. All documentation demonstrating compliance with the Order must be submitted to the Director.
- 2. It is requested (not mandated) that Enterprise maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director. 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.

The Director may grant an extension of time to comply with any of the required items upon a written request timely submitted by the Respondent demonstrating good cause for an extension. Failure to comply with this Order may result in the administrative assessment of civil penalties not to exceed \$200,000 for each violation for each day the violation continues and/or referral to the Attorney General for appropriate relief in a district court of the United States.

Under 49 C.F.R. § 190.215, Respondent has a right to submit a Petition for Reconsideration of this Order Directing Amendment. The petition must be sent to: Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2nd Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address. PHMSA will accept petitions received no later than 20 days after receipt of service of this Order Directing Amendment by the Respondent, provided they contain a brief statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.215. The filing of a petition automatically stays the payment of any civil penalty assessed. Unless the Associate Administrator, upon request, grants a stay, all other terms and conditions of this Order Directing Amendment are effective upon service in accordance with 49 C.F.R. § 190.5.

Jeffrey D. Wiese

Associate Administrator for Pipeline Safety

AUG 0 1 2013

Date Issued