

# Enterprise Products



October 15, 2008

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Pipeline and Hazardous Materials Safety Administration  
6701 South Gessner, Suite 1110  
Houston, TX 77074  
Attn: Mr. R. M. Seeley  
Director, Southwest Region

RETURN RECEIPT REQUESTED  
Certification Number  
7007 0220 0000 4313 6678

**RE: CPF 4-2008-5022**  
Enterprise Products Operating LLC  
Notice of Amendment – September 10, 2008

Dear Mr. Seeley,

In response to the Notice of Amendment concerning Enterprise Products Operating LLC's ("Enterprise") Operations and Maintenance Manual audit that was conducted the week of April 14 – 17, 2008 at Enterprise's corporate offices located at 1100, Louisiana Street, Houston, TX, please find attached the response to the six (6) items that PHMSA requests further amendments.

**Item 3A §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. §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 require 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.**

**(3) For high pressure tanks built to API Standard 2510, repairs, alterations, and reconstruction must be in accordance with API 510.**

Enterprise's breakout tank procedures need to specify that atmospheric tanks built to API Standard 650 are repaired, altered or reconstructed according to API Standard 653 and that high pressure tanks built to API Standard 2510 are repaired, altered or reconstructed according to API Standard 510.

**Enterprise's Response: See Procedure 1 attached.**

**Item 3C §195.264 Aboveground breakout tanks.**

**(a) A means must be provided for containing hazardous liquids in the event of spillage or failure of an above ground 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.**

**(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).**

Enterprise's procedures need to be consistent with the applicable version of NFPA 30 and sections of API 2510 concerning impoundment for breakout tanks.

**Enterprise's Response: See Procedure 1 attached.**

**Item 3D §195.264 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:**

**(4) Pressure and vacuum-relieving devices installed on high pressure tanks built to API Standard 2510 must be in accordance with Sections 5 or 9 of API Standard 2510.**

Enterprise's procedures need to specify that pressure and vacuum-relieving devices installed on high pressure tanks built to API Standard 2510 must be in accordance with Sections 5 or 9 of API Standard 2510.

**Enterprise's Response: See Procedure 1 attached.**

**Item 3H §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 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.**

Enterprise's procedures need to specify that aboveground atmospheric pressure breakout tanks built to API 650 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. Also procedures need to specify that high pressure tanks built to API 2510 and placed in service after October 2, 2000 must be pressure tested in accordance with ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 or 2.

**Enterprise's Response: See Procedure 1 attached.**

**Item 3K §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)).**

Enterprise's procedures must specify the consideration of potentially hazardous conditions, safety practices and procedures associated with access/egress onto floating roofs as addressed in API Publication 2026.

**Enterprise's Response: See Procedure 1 attached.**

**Item 3L §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.**

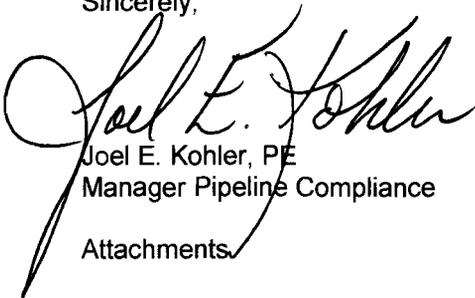
Enterprise's procedures need to specify that repairs to breakout tanks will be made in a safe manner as to prevent damage to persons or property.

**Enterprise's Response: See Procedure 2 attached.**

The attached are Enterprise's procedure for breakout tanks and partial procedure for pipeline repairs with each of the appropriate items above, addressed and highlighted as an addition to the procedures. We are in the process of finalizing our annual manual review and, upon your acceptance, these proposed changes will be incorporated into the 2008 Liquids O&M Manual.

If you have any comments or questions, please feel free to contact the undersigned at (713) 381-4830 or by e-mail at [jkohler@epco.com](mailto:jkohler@epco.com).

Sincerely,



Joel E. Kohler, PE  
Manager Pipeline Compliance

Attachments

## PROCEDURE 1

### 5.24 BREAKOUT TANKS

#### **§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)).

#### **§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 shall inspect the physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to section 4 of API Standard 653. 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). (c) Each operator shall inspect the physical integrity of in-service steel aboveground breakout tanks built to API Standard 2510 according to section 6 of API 510. (d) The intervals of inspection specified by documents referenced in paragraphs (b) and (c) of this section begin on May 3, 1999, or on the operator's last recorded date of the inspection, whichever is earlier.

#### 5.24.1 Inspections

##### *Atmospheric Breakout Tanks*

Atmospheric tanks, including low-pressure breakout tanks, are used to store refined products or crude oil. These tanks shall be inspected, repaired, altered or reconstructed in accordance with Section 4 of the most current accepted edition of API Standard No. 653.

3A

##### *Pressurized Breakout Tanks*

Pressurized breakout tanks are used in conjunction with natural gas liquids (NGL) and anhydrous ammonia. If applicable, these tanks shall be inspected, repaired, altered or reconstructed in accordance with Section 6 of the most current accepted edition of API 510 Pressure Vessel Inspection Code.

3A

##### *Floating Roof Breakout Tanks*

For those aboveground breakout tanks having floating roofs, the Company will ensure adequate protection is provided in various cases where ignition is

possible. This will be done in accordance with the API RP 2003 standard. In regards to the hazards associated with access/egress onto floating roof breakout tanks to perform various inspection, testing, repairing, operations and maintenance activities, the Company will **take into consideration, potentially hazardous conditions, safety practices and procedures addressed in the most current accepted edition of API Publication 2026.**

3K

#### *Other Breakout Tanks*

Aboveground breakout tanks, other than those subject to API 653 or API 510 that may be in service shall be inspected once each calendar year with intervals not to exceed 15 months.

#### **§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 Standard 2510, the installation of impoundment must be in accordance with section 5 or 11 of API Standard 2510 (incorporated by reference, see §195.3). (c) Aboveground breakout tank areas must be adequately protected against unauthorized entry. (d) Normal/emergency relief venting must be provided for each atmospheric pressure breakout tank. Pressure/vacuum-relieving devices must be provided for each low-pressure and high-pressure breakout tank. (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 must be in accordance with Section 4, and Appendices B and C, of API Specification 12F. (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. (3) Pressure-relieving and emergency vacuum-relieving devices installed on low pressure tanks built to API Standard 620 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). (4) Pressure and vacuum-relieving devices installed on high pressure tanks built to API Standard 2510 must be in accordance with sections 7 or 11 of API Standard 2510 (incorporated by reference, see §195.3).*

**Containment/Impoundment around a breakout tank must be installed in accordance with the applicable sections in the most current accepted version of NFPA 30 and applicable sections of the most current accepted version of API 2510.**

3C

**Pressure and vacuum-relieving devices that are installed on the Company's high pressure breakout tanks that are constructed to API Standard 2510 will be in accordance with the applicable sections of the most current accepted edition of API Standard 2510.**

3D

**§195.258 Valves: General.**

*(a) Each valve must be installed in a location that is accessible to authorized employees and that is protected from damage or tampering.*

**§195.260 Valves: Location.**

*A valve must be installed at each of the following locations: (b) On each line entering or leaving a breakout storage tank area in a manner that permits isolation of the tank area from other facilities.*

**Breakout Tank Valves**

Breakout tank areas shall have an isolation valve for each line entering or leaving the tank (s) from other facilities and will be accessible by authorized personnel and will be protected from damage or tampering.

**Inspection of Cathodic Protection System on Breakout Tanks**

Where cathodic protection is used to protect the bottoms of breakout tanks (with capacities of more than 500 barrels, built to API Specification 12F, API Standard 620, API Standard 650 or API Standard 12C), inspections of the cathodic protection system shall be conducted in accordance with API Recommended Practice 651 and the Company Corrosion Prevention Program.

**5.24.2 Relief Valve Tests**

Breakout relief valves shall be tested at intervals not to exceed five years. (See also Section 5.10)

**§195.428 Overpressure safety devices and overfill protection systems.**

*(b) In the case of relief valves on pressure breakout tanks containing highly volatile liquids, each operator shall test each valve at intervals not exceeding 5 years. (c) Aboveground breakout tanks that are constructed or significantly altered according to API Standard 2510 after October 2, 2000, must have an overfill protection system installed according to section 5.1.2 of API Standard 2510. Other aboveground breakout tanks with 600 gallons (2271 liters) or more of storage capacity that are constructed or significantly altered after October 2, 2000, must have an overfill protection system installed according to API Recommended Practice 2350. However, operators need not comply with any part of API Recommended Practice 2350 for a particular breakout tank if the operator notes in the manual required by §195.402 why compliance with that part is not necessary for safety of the tank. (d) After October 2, 2000, the requirements of paragraphs (a) and (b) of this section for inspection and testing of pressure control equipment apply to the inspection and testing of overfill protection systems.*

5.24.3 Breakout Tank Pressure Testing

***§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 12 C 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.***

For those aboveground atmospheric pressure breakout tanks originally constructed to API 650 that are returned to service after October 2, 2000, any repairs, alterations and reconstruction must be hydrostatically tested in accordance with section 10.3 of the most current accepted API Standard 653. High pressure tanks originally constructed to API 2510 and placed in service after October 2, 2000 must be pressure tested in accordance with the most current accepted version of ASME Boiler and Pressure Vessel Code, Section VIII applicable Division.

## PROCEDURE 2

### 5.5 PIPELINE REPAIRS AND PIPE MOVEMENT

***§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.*

#### 5.5.1 Procedures

All repairs to the pipeline system, including **breakout tanks**, will be made in a manner that is safe and will prevent injury to persons or damage to property.

Preparation of equipment for maintenance, permits, lockout/tagout and isolation list will be performed as prescribed in the Company Safety Manual. All components must meet the standard for new construction as set forth in the DOT regulations and applicable Engineering Standards.

3L