

**Section 31 - Petroleum Liquid Storage in
Fixed Roof Tanks.**

11/29/94

- a. Applicability.
1. This Section applies to any fixed roof petroleum liquid storage tank with a capacity greater than 150,000 liters (L) (40,000 gallons [gal]).
 2. This Section does not apply to any petroleum liquid storage tank that:
 - i. Has a capacity of less than 1,600,000 L (420,000 gal) and is used to store produced crude oil and condensate prior to lease custody transfer.
 - ii. Is a horizontal underground storage tank used to store JP-4 jet fuel.
 - iii. Contains a petroleum liquid with a maximum true vapor pressure less than 10.5 kiloPascals (kPa) (1.5 pounds per square inch atmospheric [psia]), provided that records are maintained consistent with paragraph (e)(2) of this Section.
- b. Definitions. As used in this Section, all terms not defined herein shall have the meaning given them in the November 15, 1990 Clean Air Act Amendments (CAAA), or in Section 2 of this regulation.
- c. Standards. No owner or operator of a petroleum liquid storage tank subject to this Section shall store petroleum liquid in that tank unless:
1. The tank is equipped with one of the following:
 - i. An internal floating roof equipped with a closure seal or seals to close the space between the roof edge and tank wall.
 - ii. Equally effective alternative control, approved by the Administrator of the U.S. EPA as part of a State Implementation Plan (SIP) or Federal Implementation Plan (FIP) revision.
 2. The tank is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.

3. All openings, except stub drains, are equipped with covers, lids, or seals such that:
 - i. The cover, lid, or seal is in the closed position at all times except when in actual use.
 - ii. Automatic bleeder vents are closed at all times except when the roof is being floated off or being landed on the roof leg supports.
 - iii. Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
- d. Inspections. The owner or operator of a petroleum liquid storage tank with a fixed roof subject to this Section shall:
 1. For tanks equipped with a single seal system:
 - i. Visually inspect the internal floating roof and its closure seal or seals through roof hatches at least once every 12 months.
 - ii. Perform a complete inspection of any cover and single seal whenever the tank is emptied for nonoperational reasons or at least every 10 years, whichever is more frequent.
 2. For tanks equipped with a double seal system:
 - i. Visually inspect the internal floating roof and its closure seal or seals through the roof hatches at least once every 5 years.
 - ii. Perform a complete inspection of any cover and double seal whenever the tank is emptied for nonoperational reasons or at least every 5 years, whichever is more frequent.
- e. Recordkeeping.
 1. The owner or operator of a petroleum liquid storage tank with a fixed roof subject to this Section shall maintain the following records in a readily accessible location for at least 5 years and shall make copies of the records available to the Department upon verbal or written request:
 - i. Records of the types of volatile petroleum liquids stored in that

tank.

- ii. Records of the maximum true vapor pressure of the liquid as stored.
- iii. Records of the results of the inspections required in paragraph (d) of this Section.

2. The owner or operator of a petroleum liquid storage tank with a fixed roof exempted from this Section by paragraph (a)(2), but containing a petroleum liquid with a true vapor pressure greater than 7.0 kPa (1.0 psia), shall maintain the following records in a readily accessible location for at least 5 years and shall make copies of the records available to the Department upon verbal or written request:

- i. Records of the average monthly storage temperature.
- ii. Records of the type of liquid stored.
- iii. Records of the maximum true vapor pressure for any petroleum liquid with a true vapor pressure greater than 7.0 kPa (1.0 psia).

f. Reporting. The owner or operator of any facility containing sources subject to this Section shall comply with the requirements in Section 5 of this regulation.