Subpart Ka-Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

Applicability - §60.110a

Source	All Emissions
General	 Each storage vessel for petroleum liquids which has a storage capacity greater than 151,416 liters (40,000 gallons) and for which construction is commenced after May 18, 1978. Each petroleum liquid storage vessel with a capacity of less than 1,589,873 liters (420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer is not an affected facility and, therefore, is exempt from the requirements of this subpart.

Standard for volatile organic compounds (VOC) - §60.112a

Source	All Emissions
Storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia)	 Facility must install one of the following control devices: 1.) An external floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof edge. See §60.112a (a) (1) for specific requirements. 2.) A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. See §60.112a (a) (2) for specific requirements. 3.) A vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight. 4.) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in § 60.114a
Storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure greater than 76.6 kPa (11.1 psia)	Facility shall equip the storage vessel with a vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.

Source	All Emissions
Storage vessels which have an external floating roof	 Facility shall determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall. See §60.113a (a) (1) (i) for specific requirements. Facility shall determine gap widths in the primary and secondary seals individually by the procedures found in §60.113a (a) (1) (ii). Facility shall add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the appropriate ratio in the standard in §60.112a(a)(1)(i) and §60.112a(a)(1)(ii). Facility shall provide the Administrator 30 days prior notice of the gap measurement to afford the Administrator the opportunity to have an observer present.
Storage vessel which has a vapor recovery and return or disposal system	 Facility shall provide emission data, if available, for a similar vapor recovery and return or disposal system used on the same type of storage vessel, which can be used to determine the efficiency of the system. A complete description of the emission measurement method used must be included. Facility shall provide the manufacturer's design specifications and estimated emission reduction capability of the system. Facility shall provide the operation and maintenance plan for the system. Facility shall provide any other information which will be useful to the Administrator in evaluating the effectiveness of the system in reducing VOC emissions.

Alternative means of emission limitation - §60.114a

Source	All Emissions
General	 If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112a, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement. Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing. Any person seeking permission under this section shall submit to the Administrator a written application. For specific requirements see §60.114a (c). The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112a. The primary vapor-mounted seal in the ``Volume-Maximizing Seal" manufactured by R.F.I. Services Corporation is approved as equivalent to the vapor-mounted seal required by §60.112a(a)(1)(i) and must meet the gap criteria specified in §60.112a(a)(1)(i)(B). There shall be no gaps between the tank wall and any secondary seal used in conjunction with the primary seal in the ``Volume-Maximizing Seal".

Monitoring of operations - §60.115a

Source	All Emissions
General	 Facility shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia). The following are exempt from the requirements of this section: a.) Each owner or operator of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia). Each owner or operator of each storage vessel equipped with a vapor recovery and return or disposal system in accordance with the requirements of §60.112a (a)(3) and (b).