

<p>IV. Storage of Highly Volatile Organic Compounds</p> <p>IV.A. Highly volatile organic compounds shall be stored:</p> <p>IV.A.1. In a pressure tank which is at all times capable of maintaining working pressures sufficient to prevent vapor loss to the ambient air; or</p> <p>IV.A.2. With methods and/or equipment approved by the Division in writing pursuant to the request of the person owning or operating the storage facility.</p> <p>IV.B. Vapor loss shall be determined visually, by presence of frost or condensation at the point of leakage, or using a portable hydrocarbon analyzer. When an analyzer is used, vapor loss means a VOC concentration exceeding 10,000 ppm and testing and monitoring procedures shall be conducted as in Section VIII.C.3.</p> <p>V. Disposal of Volatile Organic Compounds</p> <p>V.A. No person shall dispose of volatile organic compounds by evaporation or spillage unless RACT is utilized.</p> <p>V.B. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Section VI.C.2., VI.C.3. and XV.A.3., shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.</p>
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VI. Storage and Transfer of Petroleum Liquid

VI.A. General Requirements

VI.A.1. No person shall build, install, or permit the building or installation of any rotating pump or compressor handling any type of petroleum liquid unless said pump or compressor is equipped with mechanical seals or other equipment of equal efficiency. If reciprocating-type pumps and compressors are used, they shall be equipped with packing glands properly installed, in good working order, and properly maintained so that no detectable emissions occur from the drain recovery systems.

VI.A.2. Definitions

For the purpose of this section, the following definitions apply:

VI.A.2.a. Repealed.

VI.A.2.b. "Crude Oil" means a naturally occurring mixture which consists of hydrocarbons, sulfur, nitrogen or oxygen derivatives of hydrocarbons, and which is a liquid at standard conditions.

VI.A.2.c. "Custody Transfer" means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

VI.A.2.d. "EFR Tank" means a storage vessel having an external floating roof.

VI.A.2.e. "External Floating Roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon

and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

VI.A.2.f. "Liquid-Mounted Seal" means a primary seal mounted in continuous contact with the contained liquid and which occupies an annular space between the inner tank wall and the perimeter of the floating roof.

VI.A.2.g. "Petroleum Liquid" means crude oil, condensate and any finished or intermediate product manufactured or extracted in a petroleum refinery.

VI.A.2.h. "Shoe Seal" means a primary seal employing a metallic band (called a shoe) which is held against the vertical inner-wall of the tank, concentric with the perimeter of the floating roof.

VI.A.2.i. "Vapor Balance System" means a combination of pipes or hoses that create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

VI.A.2.j. "Vapor-Mounted Seal" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the liquid surface, the floating roof, and the tank wall (thus excluding shoe seals).

VI.A.2.k. "Waxy, Heavy Pour Crude Oil" means a crude oil with a pour point of 10°C (50°F) or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for Pour Point of Petroleum Oils."

VI.B. Storage of Petroleum Liquid

VI.B.1. Exemptions

VI.B.1.a. Tanks or other containers used to store the following liquids are exempt from the provisions of Subparagraphs VI.B.2., and 3. below:

VI.B.1.a.(i) Diesel Fuels 1-D, 2-D, and 4-D as defined in ASTM D975-78.

VI.B.1.a.(ii) Fuel Oils #1, #2, #3, #4, and #5, as defined in ASTM D396-78.

VI.B.1.a.(iii) Gas Turbine Fuels 1-GT through 4-GT as defined in ASTM D2880-78.

VI.B.1.b. The following underground storage facilities are exempt from Subpart VI.B.2. below:

VI.B.1.b.(i) Underground tanks if the annual sum total of the volume of liquid removed from the tank plus the sum of the volume of liquid added to it does not exceed twice the operational volume of the tank (i.e., a maximum of one turnover per year is allowed).

VI.B.1.b.(ii) Subsurface caverns or porous rock reservoirs.

VI.B.1.b.(iii) Horizontal underground tanks storing JP-4 Jet Fuel.

VI.B.2. Storage of petroleum liquid in tanks greater than 151,412 liters (40,000 gallons)

VI.B.2.a. Storage of petroleum liquid in fixed-roof tanks.

VI.B.2.a.(i) The owner or operator of a fixed-roof tank used for storage of petroleum liquids which have a true vapor pressure greater than 33.6 torr (0.65 psia) at 20°C (or, alternatively, a Reid vapor pressure greater than 1.30 pounds - (67.2 torr) but not greater than 570 torr (11.0 psia) at 20°C, and which are stored in any tank or other container of more than 151,412 liters (40,000 gallons) shall ensure that the tank at all times meets the following conditions:

VI.B.2.a.(i)(A) The tank has been equipped with a pontoon-type, or double-deck type, floating roof or an internal floating cover which rests on the surface of the liquid contents and which is equipped with a closure seal or seals to close the space between the edge of the floating roof (or cover) and tank walls; or

VI.B.2.a.(i)(B) The tank has been equipped with a vapor gathering system capable of collecting the petroleum liquid vapors discharged, together with a vapor recovery or disposal system capable of processing such vapors so as to prevent their emission into the atmosphere.

VI.B.2.a.(i)(C) Control devices shall meet the applicable requirements, including recordkeeping, of Subsections IX.A.3.a.b.c, and e, and IX.A.8.a and b.

VI.B.2.a.(i)(D) The applicable EPA reference methods 1 through 4, and 25, of 40 CFR Part 60 shall be used to determine the efficiency of control devices.

VI.B.2.a.(i)(E) The owner or operator shall maintain records for at least two years of the type, average monthly storage temperature, and true vapor pressure of all petroleum liquids stored in tanks not equipped with an internal floating roof or cover or other control pursuant to Regulation 7.VI.B.2.a.(i)(A) or (B) or 7.II.D.

VI.B.2.a.(ii) No owner or operator of a fixed-roof tank equipped with an internal floating roof or cover shall permit the use of such tank unless:

VI.B.2.a.(ii)(A) The tank is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials; and

VI.B.2.a.(ii)(B) All openings, except stub drains, are equipped with covers, lids, or seals such that:

- VI.B.2.a.(ii)(B)(1) The cover, lid, or seal is in the closed position at all times except when in actual use;
- VI.B.2.a.(ii)(B)(2) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
- VI.B.2.a.(ii)(B)(3) and 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.
- VI.B.2.a.(iii) The operator of a fixed-roof tank equipped with an internal floating roof shall:
- VI.B.2.a.(iii)(A) Perform a routine inspection through the tank roof hatches at least once every six months;
- VI.B.2.a.(iii)(A)(1) During the routine inspection, the operator shall measure for detectable vapor loss inside the hatch. Detectable vapor loss means a VOC concentration exceeding 10,000 ppm, using a portable hydrocarbon analyzer.
- VI.B.2.a.(iii)(B) Perform a complete inspection of the cover and seal whenever the tank is out of service, whenever the routine inspection required in subclause (A) above reveals detectable vapor loss, and at least once every ten years, and shall notify the Division in writing before such an inspection.
- VI.B.2.a.(iii)(C) Ensure during inspections that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials; that the cover is floating uniformly on or above the liquid surface; that there are no visible defects in the surface of the cover or liquid accumulated on the cover; and that the seal is uniformly in place around the circumference of the cover between the cover and the tank wall. If these items are not met, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Division in writing. Such a request must document that alternative storage capacity is unavailable and specify a schedule of actions the owner or operator will take that will assure that the items will be repaired or the vessel will be emptied as soon as possible;
- VI.B.2.a.(iii)(D) Maintain records for at least two years of the results of all inspections.
- VI.B.2.b. Above ground storage tanks used for the storage of petroleum liquid shall have all external surfaces coated with a material which has a reflectivity

for solar radiation of 0.7 or more. Methods A or B of ASTM E424 shall be used to determine reflectivity. Alternatively, any untinted white paint may be used which is specified by the manufacturer for such use.

This provision shall not apply to written symbols or logograms applied to the external surface of the container for purposes of identification provided such symbols do not cover more than 20% of the exposed top and side surface area of the container or more than 18.6 square meters (200 square feet), whichever is less.

VI.B.2.c. Seals on External Floating Roof Tanks

VI.B.2.c.(i) General Provisions

VI.B.2.c.(i)(A) Applicability

This section applies to all petroleum liquid storage vessels equipped with external floating roofs, having capacities greater than 150,000 liters (40,000 gallons) that are located in ozone nonattainment areas.

VI.B.2.c.(i)(B) Exemptions

VI.B.2.c.(i)(B)(1) Total Exemption

The following categories of EFR tanks are exempt from the requirement of Subparagraph VI.B.2.c., except for the applicable recordkeeping requirements of Subparagraph VI.B.2.c.(ii)(C).

VI.B.2.c.(i)(B)(1)(a) EFR tanks which store any material whose true vapor pressure as stored never exceeds 67 torr (1.3 psia).

VI.B.2.c.(i)(B)(1)(b) Tanks less than 1,600,000 liters (10,000 barrels) which are used to store crude oil and condensate prior to custody transfer.

VI.B.2.c.(i)(B)(2) Limited Exemptions

The following are exempt from both secondary seal and secondary seal inspection requirements but shall meet the equipment/procedure provisions in Subclause (ii)(A), the semi-annual inspection provisions of Subclause (ii)(B), and the record keeping provisions of Subclause (ii)(C).

VI.B.2.c.(i)(B)(2)(a) Those tanks storing petroleum liquid between 67 and 207 torr (1.3 to 4.0 psia) maximum true vapor pressure (as stored) which are of welded construction and which have one of the following primary seals:

VI.B.2.c.(i)(B)(2)(a)(I) metallic shoe seal

VI.B.2.c.(i)(B)(2)(a)(II) liquid mounted, resilient seal

VI.B.2.c.(i)(B)(2)(a)(III) liquid mounted, liquid filled seal

VI.B.2.c.(i)(B)(2)(b) Any tank storing waxy, heavy-pour crude oil.

VI.B.2.c.(ii) General Requirements

VI.B.2.c.(ii)(A) An operator of an EFR tank storing petroleum liquids with true vapor pressure (as stored) above 67 torr (1.3 psia) shall equip the tank as follows and observe the following procedures:

VI.B.2.c.(ii)(A)(1) Equipment

VI.B.2.c.(ii)(A)(1)(a) Drains: roof drains which are designed to empty directly into the stored product shall be provided with slotted-membrane fabric covers or equivalent covers which cover at least 90 percent of the area of the opening.

VI.B.2.c.(ii)(A)(1)(b) Openings: except for automatic bleeder vents, rim space vents, and leg sleeves, all openings shall be equipped with:

VI.B.2.c.(ii)(A)(1)(b)(I) Projections into the tank which remain below the liquid surface at all times; and

VI.B.2.c.(ii)(A)(1)(b)(II) Covers, seals, or lids.

VI.B.2.c.(ii)(A)(2) Procedures

VI.B.2.c.(ii)(A)(2)(a) Covers, seals and lids shall be kept closed except when the openings are in actual use.

VI.B.2.c.(ii)(A)(2)(b) Automatic bleeder vents shall be kept closed at all times except when the roof is floated off or landed on roof leg supports.

VI.B.2.c.(ii)(A)(2)(c) Rim vents shall be set to open at the manufacturer's recommended setting or, alternatively, only when the roof is being floated off the leg supports.

VI.B.2.c.(ii)(B) Inspections

The operator of an EFR tank subject to this Subparagraph (VI.B.2.c.) shall:

VI.B.2.c.(ii)(B)(1) Perform routine inspections at least once every six months in order to ensure compliance with Part (2) below. The inspections shall include a visual inspection of the secondary seal gap if equipped with a secondary seal

VI.B.2.c.(ii)(B)(2) Ensure that all seal closure devices meet the following requirements:

VI.B.2.c.(ii)(B)(2)(a) There are no visible holes, tears, or other openings in the seal(s) or seal fabric; and

VI.B.2.c.(ii)(B)(2)(b) The seal(s) are intact and uniformly in place around the circumference of the floating roof and the tank wall.

VI.B.2.c.(ii)(C) Records

VI.B.2.c.(ii)(C)(1) Operators shall:

VI.B.2.c.(ii)(C)(1)(a) Maintain records of the average monthly storage temperature, the Reid vapor pressure of the liquid and the type of liquid stored for all EFR tanks lacking secondary seals and receiving petroleum liquids with a true vapor pressure of 1.0 psi (7.0kPa) or greater; and

VI.B.2.c.(ii)(C)(1)(b) Maintain records of the results of the inspections required herein.

VI.B.2.c.(ii)(C)(2) Copies of all records specified by this Subclause (C) shall be retained by the operator for a minimum of two years after the date on which the record was made.

VI.B.2.c.(iii) Secondary Seal Requirements

VI.B.2.c.(iii)(A) General

No owner or operator of an EFR tank (storing petroleum liquids) not specifically exempted in Subsection VI.B.2.c.(i)(B) above shall store that petroleum liquid unless such vessel is equipped with a continuous secondary seal extending from the rim of the floating roof to the tank wall (i.e., a rim-mounted secondary seal).

VI.B.2.c.(iii)(B) Vapor-Mounted Seals

For EFR tanks required to have a secondary seal and which have a vapor-mounted primary seal:

VI.B.2.c.(iii)(B)(1) An annual inspection shall be made of the total gap area between the secondary seal and the wall of the tank in accordance with the method in (3) below.

VI.B.2.c.(iii)(B)(2) This total gap area shall not exceed 21.2 cm²/meter diameter (1.0 in²/ft. diameter).

VI.B.2.c.(iii)(B)(3) Method to determine gap area:

- VI.B.2.c.(iii)(B)(3)(a) Physically measure the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 in.) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and the tank wall; and.
- VI.B.2.c.(iii)(B)(3)(b) Sum the area of the individual gaps.
- VI.B.3 Storage of petroleum liquid in tanks of or less than 151,412 liters (40,000 gallons) capacity
- VI.B.3.a. Tanks or containers used to store liquids with true vapor pressure at 20°C of less than 78 torr (1.5 psia) or greater than 570 torr (11.0 psia) at 20°C are exempt from the provisions of this Paragraph VI.B.3.
- VI.B.3.b. The owner or operator of storage tanks at a gasoline dispensing facility (service station) or other facility not addressed in Subsections VI. C.2 OR VI.C.3, which receives and stores petroleum liquid, shall not allow the transfer of petroleum liquid from any delivery vessel into any tank unless the tank is equipped with a submerged fill pipe and the vapors displaced from the storage tank during filling are processed by a vapor control system, if the tank:
- VI.B.3.b.(i) Has a rated manufacturer's capacity of 2,082 liters (550 gallons) or more and was installed after November 7, 1973, (except for storage tanks below 550 gallon capacity used exclusively for agricultural use; however, these must have a submerged fill pipe), or
- VI.B.3.b.(ii) Has a rated manufacturer's capacity of 7,571 liters (2,000 gallons) or more and was installed before November 7, 1973.
- VI.B.3.b.(iii) A vapor balance system shall be deemed "approved" if its design and operation are in accordance with the applicable provisions of Appendices A and B.
- VI.B.3.c. Tanks equipped with a submerged fill pipe shall meet the specifications of Appendix B.
- VI.B.3.d. The vapor control system shall include one or more of the following:
- VI.B.3.d.(i) A vapor-tight line from the storage tank to delivery vessel (i.e. an approved control system).
- VI.B.3.d.(ii) A refrigerator-condensation system or equivalent designed to recover at least 90 percent by weight of the organic compounds in the displaced vapor.
- VI.B.3.e. The owner or operator shall ensure that operating procedures are used so that gasoline cannot be transferred into the tank unless the vapor control system is in use.
- VI.B.3.f. The vapor balance system shall meet the specifications of Appendix B.

VI.B.3.g. The vapor balance system and the vapor control system shall meet the requirements of Section XV.

VI.B.3.h. Control devices shall meet the applicable requirements, including recordkeeping, of Subsections IX.A.3.a,b,c, and e, and IX.A.8.a and b.

VI.B.3.i. The applicable EPA reference methods 1 through 4, and 25, of 40 CFR Part 60 shall be used to determine the efficiency of control devices.

VI.C. Transfer of Petroleum Liquid

VI.C.1. Exemptions

Transfer operations involving petroleum liquid with true vapor pressures at 20°C of less than 78 torr (1.5 psia) or greater than 570 torr (11.0 psia) shall be exempt from the provisions of this Subsection C.

VI.C.2. Loading Facilities Classified as Terminals

VI.C.2.a. A terminal is defined as a petroleum liquid storage and distribution facility that has an average daily throughput of more than 76,000 liters of gasoline (20,000 gallons), which is loaded directly into transport vehicles. A rolling, 30-day average of throughput shall be used to determine the applicability of this Subsection VI.C.2.

VI.C.2.b. The owner or operator of a terminal subject to this subsection shall equip the terminal with proper loading equipment and shall follow the loading procedures listed below:

VI.C.2.b.(i) Install dry-break loading couplings to prevent petroleum liquid loss during uncoupling from vehicles.

VI.C.2.b.(ii) Install a vapor collection and disposal system which gathers vapor transferred from vehicles being loaded. The system shall include devices to prevent the release of vapor from vapor recovery hoses not in use.

VI.C.2.b.(iii) Use operating procedures to ensure that petroleum liquid cannot be transferred unless the vapor collection equipment is in use.

VI.C.2.b.(iv) Provide for the prevention of overfilling of transport vehicles with loading pump shut-offs, set stop meters, or comparable equipment.

VI.C.2.b.(v) Operate all recovery and disposal equipment at a back pressure less than the pressure relief valve setting of transport vehicles.

VI.C.2.b.(vi) Prevent the release of petroleum liquid on the ground from transport vehicles. Provision shall be made to remove any undelivered petroleum liquid with closed drainage devices.

VI.C.2.b.(vii) Maintain and operate final recovery and disposal equipment or devices in the vapor control system (i.e., control devices) so as to emit no more than 80 milligrams of volatile organic compounds per li-

ter of gasoline being loaded. Such disposal devices shall be approved by the Division.

VI.C.2.b.(viii) Prevent loading of petroleum liquid into transport vehicles which do not have valid leak-tight certification as required in Section VI.D. No truck shall be loaded unless a valid certification sticker is displayed, or a certification letter is carried in the truck.

VI.C.2.b.(ix) Follow all control procedures to prevent leaks as specified in Section XV.

VI.C.2.c. Control devices shall meet the applicable requirements, including recordkeeping of Subsections IX.A.3.a,b,c, and e, and IX.A.8.a and b.

VI.C.2.d. The applicable methods of 40 CFR 60. 503, or EPA reference methods 1 through 4, 25A, and 25B of 40 CFR Part 60 shall be used to determine the efficiency of control devices.

VI.C.2.e. The method set forth in Appendix A of EPA-450/2-77-026, "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals" shall be used to test emission points other than control devices.

VI.C.3. Loading Facilities Classified as Bulk Plants

VI.C.3.a. A bulk plant is defined as a petroleum liquid storage and distribution facility that has an average daily throughput of 76,000 liters of gasoline (20,000 gallons) or less, which is loaded directly into transport trucks. (As used herein, "bulk plant" does not include service stations nor separate operations within petroleum liquid distribution facilities which pump only into fuel tanks fueling motor vehicles. Both such operations are regulated by Paragraph VI.B.3. of this Regulation). A rolling 30-day average of throughput shall be used to determine the applicability of this regulation.

VI.C.3.b. The owner or operator of a bulk storage plant subject to this subsection shall install an approved vapor balance system to return vapors to the incoming transport trucks during the filling of tanks controlled under Paragraph VI.B.3. (A vapor balance system shall be deemed "approved" if its design and operation is in accord with the provisions of Appendix C of this Regulation.)

VI.C.3.c. The owner or operator of a bulk plant which serves storage tanks which are required to collect and recover vapor as prescribed in Paragraph VI.B.3. shall:

VI.C.3.c.(i) Install and operate vapor collection and return equipment on any transport vehicles used to deliver to controlled tanks, and

VI.C.3.c.(ii) Install and operate vapor collection and return equipment at loading facilities to collect vapors during loading of tank compartments of outbound transport trucks and return these vapors to the bulk plant storage tanks, using an approved vapor balance system.

VI.C.3.c.(iii) Assure that transport trucks and loading facilities conform to the applicable provisions of C.2. and C.4. of this Section VI.

VI.C.3.d. The owner or operator of a bulk plant which serves only storage tanks exempted from the provisions of Subparagraph VI.B.3.b. by reason of their small size or location in an attainment area shall load outbound transport trucks using equipment that provides for top loading of the petroleum liquid into the vehicle tank compartments through an extended fill tube which reaches within 15.24 cm (6 in.) of the bottom of the tank compartment.

VI.C.3.e. The owner or operator of a bulk plant subject to this subsection shall ensure that petroleum liquid cannot be transferred unless the vapor collection equipment is in use.

VI.C.3.f. The owner or operator of a bulk plant subject to this subsection shall follow all procedures to prevent leaks as specified in Section XV.

VI.C.4. Transport Vehicles

VI.C.4.a. Rail cars shall be loaded only at facilities which allow for the following:

VI.C.4.a.(i) A submerged fill pipe which reaches within 15.24 cm (6 in.) of the bottom of the tank.

VI.C.4.a.(ii) Vapor collection and/or disposal equipment designated and operated to recover vapors displaced during the loading of the rail car.

VI.C.4.a.(iii) A vapor-tight seal around the tank car hatch and the loading equipment.

VI.C.4.b. The owner or operator of petroleum transport trucks which serve locations required to be equipped with vapor recovery equipment shall load only at facilities capable of disposing of collected vapors. The owner or operator shall assure that such vehicles possess the proper equipment and that work practices are followed so that:

VI.C.4.b.(i) Dry-break loading and unloading nozzles are used and are compatible with those required at loading facilities.

VI.C.4.b.(ii) Vapor recovery hoses are connected at all times during unloading or loading of petroleum distillate.

VI.C.4.b.(iii) Transport trailers and vehicle tanks are operated and maintained to prevent detectable hydrocarbon vapor loss during loading, transport and delivery.

VI.C.4.b.(iv) Compartment dome lids are closed and locked during transfers of petroleum liquid. Such lids may be opened for the purpose of certifying the accuracy of a delivery only prior to and after such delivery.

VI.C.4.b.(v) Hoses, couplings, and valves are maintained to prevent dripping, leaking, or other liquid or vapor loss during loading or unloading.

VI.D. Control of Volatile Organic Compound Leaks from Gasoline Transport Trucks

VI.D.1. General Provisions

VI.D.1.a. Applicability

This subsection is applicable to all gasoline transport trucks equipped for gasoline vapor collection which receive or dispense gasoline at terminals, bulk plants, or gasoline dispensing facilities located in the nonattainment areas.

VI.D.1.b. Definitions

For the purpose of this subsection, the following definitions apply:

VI.D.1.b.(i) "Gasoline Transport Truck" means a tank truck or tank trailer equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities (e.g., service stations), bulk gasoline plants, or gasoline terminals.

VI.D.1.b.(ii) "Vapor Collection System" means a vapor transport system which uses direct displacement by the gasoline being transferred to force vapors from the vessel being loaded into a vessel being unloaded or into a vapor control system or vapor holding tank.

VI.D.1.b.(iii) "Vapor Control System" means a system that is designed to control the release of volatile organic compounds displaced from a vessel during transfer of gasoline.

VI.D.2. Provisions for Specific Processes

VI.D.2.a. No terminal operator, when monitoring the gasoline loading operation and no owner or operator of a gasoline transport truck shall allow a gasoline transport truck subject to this Subsection VI.D. to be filled with a VOC with Reid Vapor Pressure of 4.0 or greater unless the gasoline tank truck:

VI.D.2.a.(i) Is tested annually according to the test procedure referenced in Appendix E. Testing shall be completed prior to the onset of the summer ozone season (test October through April). In addition, the visual inspection detailed in Appendix E, Part B, shall be performed at least once every six months. Trucks which have not been previously certified (new gasoline transport trucks) may be tested May through September as set forth in VI.D.4.d.(iv).

VI.D.2.a.(ii) Sustains a combined absolute pressure change of no more than 5.6 torr (3 inches of H₂O) in five-minute test periods when pressurized to a gauge pressure of 33.6 torr (18 inches of H₂O), then evacuated to a gauge pressure of minus 11.2 torr (minus 6 inches of H₂O), during the testing required in Subparagraph a.(i), above (i.e., the sum of the absolute pressure change determined by the pressure test plus the absolute pressure change determined by the vacuum test shall not exceed 3 inches of water); and

VI.D.2.a.(ii)(A) Sustains a leak rate of no more than 5.6 torr (3 inches H₂O) in five minutes when the internal vapor valves are tested according to procedures in Part E., Appendix E.

VI.D.2.a.(ii)(b) Passes a retest within twenty (20) days if it does not meet the criteria of a.(ii) and (iii) above.

VI.D.2.a.(ii)(C) At all times carries an unexpired certification sticker (pursuant to Subparagraphs D.4.c. and d.).

VI.D.2.b Monitoring

VI.D.2.b.(i) The Division may, at any time, monitor a gasoline tank truck vapor collection system, or vapor control system, by the method referenced in Subparagraph D.3.c to confirm continued compliance with Subparagraph 2.a. above.

VI.D.2.b.(ii) Within fifteen (15) days after an exceedance is detected a tank shall pass:

VI.D.2.b.(ii)(A) A pressure/vacuum test per Appendix E; or

VI.D.2.b.(ii)(B) A test with combustible gas detector using procedures referenced in Subparagraph 3.c such that no leak over 60% of the propane lower explosive limit (LEL) exists.

VI.D.3. Testing and Monitoring

VI.D.3.a The owner or operator of a gasoline transport truck shall at their own expense, demonstrate compliance with Paragraph 2, by methods of Appendix E. All tests shall be made by, or under the direction of, a person qualified by training and/or experience in the field of air pollution testing or gasoline transport truck maintenance.

VI.D.3.b. The owner or operator of a gasoline transport truck subject to this regulation must notify the Division of the date and location of a certification test at least forty-eight (48) hours before an anticipated test date, except that for the first truck tested by a given transport company and for the first test by a given testing facility, five (5) days notice must be given the Division; or alternatively, a designated individual within the Division may orally waive the above notice requirements and allow a shorter notice period before the test.

VI.D.3.c. Monitoring to confirm the continuing existence of leak tight conditions shall be consistent with the procedures described in Appendix B. of "Control of Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems," EPA-450/2-78-051.

VI.D.4. Recordkeeping and Reporting

VI.D.4.a. The owner or operator of a gasoline transport truck subject to this Subsection D. shall maintain records of all certification testing and repairs. The records shall identify the gasoline transport truck, the date of the test or repairs and, if applicable, the type of repair and the date of retest. The written record shall include entries of any pre-test repairs, adjustments, or modifications. These shall also include the part name, number, and vendor name

of any part removed and of any part installed. The records shall be maintained in legible, readily available form for at least two (2) years after the date the testing or repair was completed and shall be made available to the Division for inspection upon request.

VI.D.4.b. The records of certification tests required by Subparagraph 2.a. of this Subsection D. shall, as a minimum, contain all of the following entries:

VI.D.4.b.(i) The gasoline transport truck/tank identification number.

VI.D.4.b.(ii) The following data for each test trial:

VI.D.4.b.(ii)(A) The initial test pressure and the time of the reading.

VI.D.4.b.(ii)(B) The final test pressure and the time of the reading.

VI.D.4.b.(ii)(C) The initial test vacuum and the time of the reading.

VI.D.4.b.(ii)(D) The final test vacuum and the time of the reading.

VI.D.4.b.(ii)(E) For the vapor valve test, the initial test-pressure and time of reading; and

VI.D.4.b.(ii)(F) The final test-pressure and the time of the reading.

VI.D.4.b.(iii) The size of each of the compartments within the tank and whether such compartment was manifolded or was tested separately during pressure and vacuum tests.

VI.D.4.b.(iv) At the top of each report page shall be the company name and the date and location of the test results recorded on that page; and

VI.D.4.b.(v) Name and title of the person conducting the test.

VI.D.4.c. The owner or operator of a gasoline transport truck subject to this regulation must annually certify to the Division that the gasoline transport truck has been tested by an applicable method referenced in Paragraph 3. The application for certification shall include:

VI.D.4.c.(i) The name and address of the company and the name and telephone number of responsible company representative over whose signature the certification is submitted; and,

VI.D.4.c.(ii) A copy of the information recorded to comply with Subparagraph 4.b. above.

VI.D.4.d. Certification

VI.D.4.d.(i) Except as stated in Paragraphs (ii), (iii), and (iv) below, upon receipt of an application for certification that meets the above requirements, the Division shall issue a sticker and a letter of certification to be valid for 380 days after the most recent, successfully completed pressure/vacuum test, except that the expiration date shall not fall within the months of May through September. The certification

shall be valid for less than 380 days if necessary to remain within the allowable test period of October through April.

VI.D.4.d.(ii) Owners or operators of gasoline transport trucks with certificates that expire May 1, 1990 (1991) through July 31, 1990 (1991) shall renew their certificates in March or April, 1990 (1991).

VI.D.4.d.(iii) Owners or operators of gasoline transport trucks with certificates that expire August 1, 1990 (1991) through September 30, 1990 (1991) shall renew their certificates in October or November 1990 (1991). Certificates which expire August 1, 1990 (1991) through September 30, 1990 (1991) shall be valid until November 30, 1990 (1991).

VI.D.4.d.(iv) Owners or operators of previously uncertified trucks (new gasoline transport trucks) subject to this subsection may obtain initial certification May 1 through September 30, if necessary. Certification for such trucks certified May 1 through July 31 shall be valid for 270 days. Certification for such trucks certified August 1 through September 30 shall be valid for 430 days. All expiration dates for such certificates shall fall within the allowable testing period of October through April.

VI.D.4.d.(v) This certification shall be revoked if monitoring detects an exceedance which is not corrected within fifteen (15) days of initial detection, or if the exceedance is judged so severe as to warrant immediate revocation (i.e., no seal is maintained during transfer).

VI.D.4.e. The certification letter shall be kept with the tank or at the transport company office at all times and shall be shown to Division personnel upon their request. Copies of all records and reports required by the provisions of this Subsection D. shall be made available to the Division upon oral or written request. The tank shall at all times prominently display a valid sticker when containing gasoline in the ozone nonattainment area.

VII. Crude Oil
VII.A. General Exemptions
VII.A.1. Storage tanks of 151,412 liters (40,000 gallons) or less used to store crude oil are exempt from the provisions of this section.
VII.A.2. Storage tanks with capacities of less than 1,590 cubic meters (10,000 barrels) used to store crude oil and condensate prior to lease custody transfer are exempt from the provisions of this Regulation Number 7 other than Sections XII and XVII.
VII.B. Equipment
Pumps and compressors handling crude oil shall be subject to the provisions of Subsection VI.A.
VII.C. Storage
Except as provided in VII.A.2. above, crude oil stored in tanks greater than 151,412 liters (40,000 gallons) shall be subject to the provisions of Subparagraph B.1.b. and Paragraph B.2. of Section VI.