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TITLE 250 – DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 120 – AIR RESOURCES

SUBCHAPTER 05 – AIR POLLUTION CONTROL

PART 11 – PETROLEUM LIQUIDS MARKETING AND STORAGE

11.1 Purpose and Authority

11.1.1 Purpose

A. The purpose of this regulation is to regulate the storage and marketing of petroleum liquids to minimize emissions of volatile organic compounds.

11.1.2 Authority

A. These regulations are authorized pursuant to R.I. Gen. Laws § 42-17.1-2(19) and Chapter 23-23, as amended, and have been promulgated pursuant to the procedures set forth in the R.I. Administrative Procedures Act, R.I. Gen. Laws Chapter 42-35.

11.2 Incorporated Materials

A. These Regulations hereby adopt and incorporate Appendix B and C of the Environmental Protection Agency's "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (EPA-450/2-78-051) (1978) and by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these Regulations.

B. These Regulations hereby adopt and incorporate Section 14 of the Petroleum Equipment Institute's "Recommended Practices for Installation and Testing of Vapor-Recovery Systems at Vehicle Fueling Sites" (PEI/RP300-09) (2009) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these Regulations.

C. These Regulations hereby adopt and incorporate the American Society for Testing and Materials' "D323-15a" (2015) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these Regulations.

D. These Regulations hereby adopt and incorporate 40 C.F.R Part 60 §§ 60.503; 40 CFR Part 60 Appendix A-8 Method 27; (2020) by reference, not including any

further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these Regulations.

E. These Regulations hereby adopt and incorporate California Air Resources Board, testing procedures TP-201.3, TP-201.3C, TP-201.1B, TP-20 1.1C, TP-201.1D, and TP-201.1E (2020), by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these Regulations.

F. These Regulations hereby adopt and incorporate California Air Resources Board, Vapor Recovery Phase I EVR Executive Orders: VR-101-V (April 27, 2022), VR-102-V (May 31, 2021), VR-104-L (May 31,2021), VR-105-J (May 31,2021), VR-301-J (June 2,2022), VR-302-J (June 2, 2022), VR-401-F (July 17, 2019), VR-402-F (January 25, 2022), or G-70-216 (2020) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these Regulations.

11.3 Definitions

A. Unless otherwise expressly defined in this Section, the terms used in this regulation shall be defined by reference to Part 0 of this Subchapter (General Definitions). As used in this regulation, the following terms shall, where the context permits, be construed as follows:

1. "Best extent possible" means there shall be no reading at 2.5 centimeters from any potential leak source, greater than or equal to one hundred percent (100%) of the lower explosive limit, LEL, measured as propane, as detected by a combustible gas detector using the test procedure described in Appendix B of the EPA document entitled "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (EPA-450/2-78-051), incorporated in § 11.2(A) of this Part.

2. "Bottom filling" means the filling of a tank truck or stationary storage tank through an opening that is flush with the tank bottom.

3. "Bulk gasoline plant" means a gasoline storage and distribution facility with an average daily throughput of twenty thousand (20,000) gallons or less but greater than four thousand (4,000) gallons which receives gasoline from bulk terminals by trailer transport or railroad tank car, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

4. "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, railroad tank car, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or

retail accounts primarily by tank truck; and has a daily throughput of more than twenty thousand (20,000) gallons of gasoline.

5. "California Air Resources Board (CARB) certified enhanced vapor recovery (EVR) Stage I component or CARB-certified EVR Stage 1 component" means a component identified in any of the CARB Vapor Recovery Phase 1 EVR Executive Orders: VR-101-V (April 27, 2022), VR-102-V (May 31, 2021), VR-104-L (May 31,2021), VR-105-J (May 31,2021), for underground storage tanks and CARB Vapor Recovery Phase 1 EVR Executive Orders: VR-301-J (June 2,2022), VR-302-J (June 2, 2022), VR-401-F (July 17, 2019), VR-402-F (January 25, 2022), or G-70-216 (2020) for aboveground storage tanks, incorporated in § 11.2(F) of this Part.

6. "California Air Resources Board (CARB) certified enhanced vapor recovery (EVR) stage I vapor control system or CARB-certified EVR stage I vapor control system" means a vapor control system as identified in any CARB Vapor Recovery Phase 1 EVR Executive Orders: VR-101-V (April 27, 2022), VR-102-V (May 31, 2021), VR-104-L (May 31,2021), VR-105-J (May 31,2021), for underground storage tanks and CARB Vapor Recovery Phase 1 EVR Executive Orders: VR-301-J (June 2,2022), VR-302-J (June 2, 2022), VR-401-F (July 17, 2019), VR-402-F (January 25, 2022), or G-70-216 (2020) for aboveground storage tanks incorporated in § 11.2(F) of this Part.

7. "Corporate or commercial fleets" means vehicles used for business purposes which are owned by corporations, governments, universities or other organizations.

8. "Daily throughput" means the average amount of gasoline that a bulk gasoline terminal or plant dispenses in a day from that facility and is defined as the thirty (30) day rolling average throughput of the facility. This is used to determine applicability, not compliance.

9. "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 shell.

10. "Gasoline" means any petroleum distillate having a Reid vapor pressure of more than four (4.0) psia as determined by ASTM Method D323-15a, incorporated in § 11.2(C)of this Part. This term includes but is not limited to mixtures of alcohols and gasoline.

11. "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage vessels.

12. "Leak" means a meter reading from a combustible gas detector greater or equal to one hundred percent (100%) lower explosive limit as propane.

13. "Liquid-mounted seal" means a primary seal mounted in continuous contact with the liquid around the circumference of the tank between the tank wall and the floating roof.

14. "Monthly throughput" means the amount of gasoline that a gasoline dispensing facility dispenses in a month. This amount is used to determine applicability, not compliance.

15. "Motor Vehicle Fuel" means any petroleum distillate having a Reid Vapor Pressure or more than four pounds per square inch as determined by ASTM Method D323 and which is used primarily to power motor vehicles. This definition includes, but is not limited to, gasoline and mixtures of simple alcohols and gasoline. This definition excludes jet fuel.

16. "Onboard refueling vapor recovery" or "ORVR" means a vehicle emission control system that captures fuel vapors from the vehicle gas tank during refueling.

17. "Operator" means any person who leases, operates, controls or supervises a facility at which gasoline is dispensed.

18. "Owner" means any person who has legal or equitable title to the gasoline storage vessel at a facility.

19. "Petroleum liquids" means crude oil, condensate and any finished or intermediate products manufactured or extracted in a petroleum refinery whose true vapor pressure is greater than 1.52 psia (10.5 kilo pascals) at sixty-nine degrees Fahrenheit (69°F).

20. "Splash filling" means the filling of a tank truck or stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.

21. "Stage I or Phase I vapor control system" means a closed system between the vapor spaces of an unloading gasoline tank truck and a receiving gasoline dispensing facility storage tank such that vapors displaced from the storage tank are transferred to the tank truck that is being unloaded.

22. "Stage II vapor collection and control system" means a system which collects gasoline vapors displaced from motor vehicle gasoline tanks during refueling and which routes the vapors to a stationary storage tank.

23. "Submerged fill pipe" means any fill pipe the discharge opening of which is entirely submerged when the liquid level is six (6) inches above the bottom

of the tank; or when applied to a tank which is loaded from the side, shall mean any fill pipe the discharge of which is entirely submerged when the liquid level is eighteen (18) inches or twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.

24. "Submerged filling" means the filling of a tank truck or stationary tank through a submerged fill pipe whose discharge opening is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.

25. "Substantially modified" means a modification of an existing gasoline dispensing facility which involves the addition, repair, replacement, or reconditioning of stationary storage tanks. Any excavation at an existing gasoline dispensing facility which has the potential to affect the integrity or pitch of any Stage II vapor return, manifold or vent piping is also considered a substantial modification.

26. "Vacuum assist system" means a Stage II vapor collection and control system which employs a pump, blower or other vacuum inducing device to collect and/or process gasoline vapors.

27. "Vapor" means those components of gasoline that have been volatilized to the gaseous phase from the liquid phase.

28. "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading vessel and a receiving vessel such that vapors displaced from the receiving vessel are transferred to the vessel being unloaded.

29. "Vapor tight" means equipment that allows no loss of vapors. Equipment is considered vapor-tight if the vapor concentration at a potential leak source is not equal to or greater than 100 percent (100%) of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of one (1) inch from the source.

30. "Vapor-mounted seal" means a primary seal mounted so there is a vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

11.4 Storage of Petroleum Liquids - Fixed Roof Tanks

11.4.1 Prohibitions and Requirements

A. No person shall place, store or hold in any stationary vessel, reservoir, or other container of more than forty thousand (40,000) gallons capacity any petroleum liquids unless such tank reservoir or other container is a pressure tank capable of

maintaining working pressures sufficient at all times to prevent vapor or gas loss to the outdoor atmosphere unless:

1. The source utilizes an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall such that:

    a. The cover must float uniformly on the liquid;

    b. There is no accumulated liquid on the cover, and;

    c. The seal is intact and uniformly in place around the circumference of the cover between the cover and tank wall, or

2. The source utilizes an alternative control device that is at least ninety-five percent (95%) effective at reducing or recovering VOC emissions, approved by the Director, and

3. The source is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials, and

4. Where applicable, all openings, except stub drains, are equipped with covers, lids, or seals such that:

    a. The cover, lid, or seal is in the closed position at all times except when in actual use, and

    b. Automatic bleeder vents are closed at all times except when the roof is being floated off or being landed on the roof leg supports, and

    c. 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, and

5. Routine visual inspections of the internal floating roof and the primary and secondary seals are conducted through roof hatches on an annual basis, and

6. A complete visual inspection of the internal floating roof, the primary and secondary seals, gaskets, slotted membranes and sleeve seals is conducted whenever the tank is emptied or once every ten (10) years, whichever is more frequent, or

7. The source utilized a vapor recovery system consisting of a device capable of collecting the vapor from volatile organic liquids and gases so as to prevent their emissions to the outdoor atmosphere. All tank gauging

and sampling devices shall be gas tight except when gauging or sampling is taking place.

11.4.2 Records

A. Records are to be maintained at the facility by the owner or operator of a source defined in § 11.4.1 of this Part and shall include:

1. Reports of the results of inspections conducted under §§ 11.4.1(A)(5) and (6) of this Part.

2. Records of daily throughput quantities, types of volatile petroleum liquids, average monthly storage temperature, and true vapor pressure of the stored liquid.

3. Records for both scheduled and unscheduled maintenance.

B. Records cited in § 11.4.2(A) of this Part shall be maintained for a period of three (3) years and shall be accessible for review by the Director, personnel designated by the Director, or the EPA.

11.5 Bulk Gasoline Terminals

A. § 11.5 of this Part shall apply to bulk gasoline terminals and appurtenant equipment necessary to load and unload the tank trucks, railroad tank cars or trailer compartment. If a source is ever considered a bulk terminal because it surpasses the daily throughput under the definition in § 11.3(A)(4) of this Part, it is always subject to this regulation even if it goes below the daily throughput.

11.5.1 Prohibitions

A. No person shall load or unload gasoline into any tank trucks, railroad tank cars, or trailers from any bulk gasoline terminal unless the above-mentioned vessels are equipped with a vapor balance system, and

1. The bulk gasoline terminal is equipped with a vapor control system properly installed, maintained and in good working order, in operation and that prevents emissions to the atmosphere from exceeding 0.30 grams per gallon (80 grams/1000 liters) of gasoline loaded over any 6-hour period as determined by § 11.5.3 of this Part. The vapor collection and processing equipment must be designed and operated to prevent gauge pressure in the tank truck from exceeding eighteen (18) inches of water and prevent vacuum from exceeding six (6) inches of water, and

2. A connecting pipe or hose from the loading rack to the delivery vessel is equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of volatile organic materials to the best extent possible, and

3. A vapor space connection on the tank truck, railroad tank car, or trailer equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of volatile organic materials to the best extent possible.

4. The bulk gasoline terminal is equipped with a vapor control system, capable of complying with § 11.5.1(A)(1) of this Part, properly installed, in good working order, in operation and consistent with one of the following:

   a. An adsorber or condensation system which processes and recovers at least ninety percent (90%) by weight of all vapors and gases from the equipment being controlled; or,

   b. A vapor collection system which directs all vapors to a fuel gas system and reduces emissions by at least ninety percent (90%) by weight all vapors and gases from the devices being controlled; or,

   c. A control system determined to be equally effective and approved by the Director.

B. Sources affected under § 11.5 of this Part may not:

1. Allow gasoline to be discarded in sewers or stored in open containers or handled in any manner that would result in evaporation, nor

2. Allow the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.

C. All pumps and compressors handling gasoline shall have mechanical seals or other equipment for the purposes of air pollution control as approved by the Director and EPA. The seals or other equipment, when tested by a combustible gas detector at 2.5 centimeters from any potential leak points, shall give no reading of greater than one hundred percent (100%) of the lower explosive limit, measured as propane.

D. The emergency venting of vessels covered by § 11.5.1(A) of this Part shall be in accordance with the federal DOT specifications for cargo tanks and tank cars authorized to carry hazardous materials. Emergency venting shall not be considered a violation.

11.5.2 Records

A. Records shall be maintained at the facility by the owner or operator of a bulk gasoline terminal and shall include:

1. Records of daily throughput quantities of gasoline.

2. Records for both scheduled and unscheduled maintenance of the vapor control system that is described in § 11.5.1(A)(1) of this Part.

B. Records cited in § 11.5.2(A) of this Part should be maintained for a period of three (3) years and should be accessible for review by the Director, personnel designated by the Director, or the EPA.

11.5.3 Compliance Test Methods

A. Compliance with the emission limitations set forth in § 11.5 of this Part shall be determined by using the procedures, compliance averaging times (six (6) hours), and test methods which are detailed in 40 C.F.R § 60.503, incorporated in § 11.2(D) of this Part, or any other method approved by the Director and EPA.

11.6 Bulk Gasoline Plants

A. This regulation shall apply to the unloading, loading and storage facilities of all bulk gasoline plants and all tank trucks delivering or receiving gasoline at bulk gasoline plants. If a source is ever considered a bulk plant because it surpasses the daily throughput under the definition in § 11.3(A)(3) of this Part, it is always subject to this regulation even if it goes below the daily throughput.

11.6.1 Prohibitions

A. No owner or operator of a bulk gasoline plant, tank truck, railroad tank car or trailer may permit the loading or unloading of account trucks, tank trucks, railroad tank cars or trailers at a bulk gasoline plant unless each account truck, tank truck, railroad tank car, or trailer is equipped with a vapor balance system as described in § 11.6.1(B) of this Part and approved by the Director, and

1. Equipment is available at the bulk gasoline plant to provide for the submerged filling of each tank truck, railroad tank car or trailer, or

2. Each tank truck, railroad tank car or trailer is equipped for bottom filling.

B. Vapor balance systems required under § 11.6.1(A) of this Part shall prevent the release of volatile organic material to the atmosphere to the best extent possible and shall consist of the following major components:

1. A vapor space connection on the stationary storage tank equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of volatile organic material to the best extent possible, and

2. A connecting pipe or hose equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of volatile organic material to the best extent possible, and

3. A vapor space connection on the tank truck, railroad tank car or trailer equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of volatile organic material to the best extent possible.

C. No owner or operator of a bulk gasoline plant may permit gasoline to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.

11.6.2 Records

A. Records shall be maintained at the facility by the owner or operator of a bulk gasoline plant and shall include:

1. Records of daily throughput quantities of gasoline,

2. Records for both scheduled and unscheduled maintenance of vapor balance equipment as described in § 11.6.1(B) of this Part.

B. Records cited in § 11.6.2(A) of this Part should be maintained for a period of three (3) years and should be accessible for review by the Director, personnel designated by the Director, or the EPA.

11.6.3 Compliance Test Methods

A. Compliance with the emission limitations set forth in § 11.6 of this Part shall be determined by using the procedures and test methods which are detailed in Appendices B and C of EPA publication entitled "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (EPA-450/2-78-051), incorporated in § 11.2(A) of this Part.

11.7 Gasoline Dispensing Facility Stage I Vapor Controls

11.7.1 Applicability

A. § 11.7.2 of this Part shall apply to all gasoline dispensing facilities with the following exceptions:

1. Stationary gasoline storage vessels of less than five hundred fifty (550) gallons capacity used exclusively for the fueling of implements of husbandry, provided the containers are equipped with submerged fill pipes, or

2. Stationary storage vessels located at a gasoline dispensing facility with a capacity of less than two thousand (2000) gallons which is in place before July 1, 1979, or

3. Any stationary storage vessels located at a gasoline dispensing facility with a capacity of two hundred fifty (250) gallons or less which is installed after the effective date of this regulation, or

4. Any gasoline dispensing facility that is solely serviced by account trucks owned or under the control of bulk gasoline plants that are exempt from § 11.6 of this Part.

11.7.2 Prohibitions

A. Except as provided in § 11.7.1 of this Part, no person may transfer or cause or allow the transfer of gasoline from any delivery vessel into any stationary storage vessel unless the stationary storage vessel is equipped with a submerged fill pipe and the vapors displaced from the storage vessel during filling are processed by a CARB-Certified EVR Stage I vapor control system in accordance with § 11.7.2(B) of this Part.

B. The Stage I vapor control system required by § 11.7.2(A) of this Part shall be subject to the following conditions:

1. All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.

2. The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in § 11.3(A)(29) of this Part.

3. The Stage I vapor control system shall be designed such that the pressure in the tank truck does not exceed eighteen (18) inches water pressure or 5.9 inches water vacuum during product transfer.

4. The vapor recovery and product adaptors and the method of connection with the delivery elbow shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.

5. If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in § 11.3(A)(23) of this Part.

6. Liquid fill connections shall be equipped with vapor-tight caps.

C. The vapor-laden delivery vessel shall be subject to the following conditions:

1. The delivery vessel must be designed and maintained to be vapor tight at all times, and

2. The vapor-laden delivery vessel may be re-filled only at:

a. Bulk gasoline terminals complying with § 11.5 of this Part, or

b. Bulk gasoline plants complying with § 11.6 of this Part.

D. Each owner of a gasoline storage vessel and gasoline delivery vessel covered by § 11.7.2(A) of this Part shall:

1. Purchase and install all necessary control systems and make all necessary process modifications to comply with §§ 11.7.2(B); 11.7.2(C) of this Part,

2. Provide instructions to the operator of the gasoline dispensing facility utilizing a Stage I vapor control system as required in § 11.7.2(B) of this Part describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunctions of the control system, and

3. Repair, replace or modify any worn out or malfunctioning component or element of design in accordance with the requirements of this Part and;

a. Rules and Regulations for Underground Storage Facilities Used for Regulated Substances and Hazardous Materials (Part 140-25-1 of this Title)

b. Oil Pollution Control Regulations (Part 140-25-2 of this Title).

E. Each operator of a gasoline dispensing facility covered by § 11.7.2(B) of this Part shall:

1. Maintain and operate the Stage I vapor control system in accordance with the specifications and the operating and maintenance procedures specified by the owner, and

2. Promptly notify the owner of the Stage I vapor control system of any scheduled maintenance or malfunction requiring replacement or repair of major components in the system.

F. The Stage I vapor control system required in § 11.7.2(A) of this Part shall be subject to the following conditions:

1. All gasoline dispensing facilities shall be equipped with a California Air Resources Board (CARB) certified Enhanced Vapor Recovery (EVR) Stage I pressure-vacuum (PV) vent valve;

2. All gasoline dispensing facilities, except those facilities with coaxial tank systems, shall be equipped with CARB-certified EVR Stage I rotatable product and vapor adaptors;

3. All gasoline dispensing facilities that begin operation, replace, or install a fuel storage tank, must be equipped with a dual-point CARB-certified EVR

Stage I vapor control system or a CARB-Certified EVR Stage I Component System upon facility start-up lowing that installation and shall not;

a. Install a coaxial Stage I system, except that an existing coaxial system may be repaired and maintained with non-EVR components until the motor vehicle fuel tank is replaced.

4. Any component of a Stage I vapor control system that is replaced, shall be replaced with a CARB-certified EVR Stage I component;

5. On and after December 25, 2020, gasoline dispensing systems must be equipped with a CARB-Certified EVR Stage I system in accordance with any one of the Executive Orders incorporated in § 11.2(F) of this Part, or a CARB-Certified EVR Stage I Component System in accordance with the applicable Executive Orders incorporated in § 11.2(F) of this Part and manufacturers guidance;

6. Aboveground storage tanks at gasoline dispensing facilities are exempt from the requirement in § 11.7.2(F)(2) of this Part to install a rotatable product adaptor or another EVR Stage I component if such installation is not technically feasible. Documentation of such technical infeasibility shall be made available to the Director on request;

11.7.3 Stage I Operation, Maintenance and Compliance Testing

A. The owner or operator of a gasoline dispensing facility with a Stage I vapor control system shall:

1. Operate and maintain the Stage I system in accordance with the system's applicable CARB Executive Orders incorporated in § 11.2(F) of this Part and manufacturers' guidance.

2. Visually inspect the facility's Stage I vapor control system weekly;

3. Conduct the following Stage I vapor control system tests at least once every twelve (12) months:

a. For all Stage I Underground Storage Tank systems:

(1) A Pressure Decay 2-inch Test, using CARB test procedure TP-201.3, incorporated in § 11.2(E) of this Part, demonstrating that the static pressure of the system meets the following specification:

$Pf = 2e-500.887/v$

Where:

Pf = Minimum allowable final pressure, inches of water.

v = Total ullage affected by the test, gallons.

e = Dimensionless constant equal to approximately 2.718.

2 = The initial pressure, inches water

(2) A Vapor Tie Test, using CARB test procedure TP-201.3C, incorporated in § 11.2(E) of this Part;

(3) A Pressure/Vacuum Vent Valve Test, using CARB test procedure TP-201.1E, incorporated in § 11.2(E) of this Part;

(4) For facilities with EVR rotatable product adaptors and/or vapor adaptors, a Static Torque Rotatable Adaptor Test, using CARB test procedure TP-201.1B, incorporated in § 11.2(E) of this Part; and

(5) For facilities with a Stage I EVR system, either a

(AA) Leak Rate of Drop Tube/Drain Valve Assembly Test using CARB test procedure TP-201.1C, incorporated in § 11.2(E) of this Part, or

(BB) Leak Rate of Drop Tube/Overfill Prevention Devices Test using CARB test procedure TP-201.1D, incorporated in § 11.2(E) of this Part.

b. For all Stage I Aboveground Storage Tank systems:

(1) Determination of Static Pressure Performance of Vapor Recovery Systems at Gasoline Dispending Facilities with Aboveground Storage Tanks in Exhibit 4 of CARB Executive Order VR-401-F and Exhibit 6 of CARB Executive Order VR-402-F incorporated in § 11.2(F) of this Part.

(2) Static Torque Rotatable Adaptor Test if rotatable adaptors are installed using CARB test procedure TP-201.1B incorporated in § 11.2(E) of this Part.

(3) Pressure/Vacuum Vent Valve Test using CARB test procedure TP-201.1E incorporated in § 11.2(E) of this Part.

4. Notify the Department of the date that testing will be conducted at least seven (7) days in advance of testing and certify to the Department in writing within fifteen (15) days of the test that testing has been completed. Such certification shall be signed by the owner or operator of the facility

and shall include a list of Stage I EVR components operating at the facility and the results of the tests required in § 11.7.3. of this Part. Test results shall be signed and certified as accurate by the person who conducted the tests.

5. Immediately replace any component of a Stage I vapor control system that is not operating properly with a properly functioning comparable CARB-Certified EVR Stage I component.

11.7.4 Recordkeeping and Reporting

A. Recordkeeping

1. Maintain at all times records of document submissions to the Department of the CARB-Certified EVR Stage I vapor recovery system installation.

2. Maintain the following records for a period of five (5) years and make those records available for inspection by representatives of the Department or the EPA on request:

a. The dates and results of weekly visual inspections as required in § 11.7.3(A)(2) of this Part,

b. The dates and results of tests performed pursuant to § 11.7.3(A)(3) of this Part,

c. Identification of Stage I vapor control system components that are replaced, the replacement components installed, and dates of such replacements, and

d. Gasoline throughput quantities.

B. Notification of Change of Ownership

1. Facility name and address

2. Name and telephone number of the owner or operator of the facility

3. Name and telephone number of the technical contact for the facility (if applicable)

4. Mailing address

11.7.5 General Requirements for Gasoline Dispensing Facilities

A. The owner or operator of a gasoline dispensing facility shall use the following measures to minimize vapor releases to the atmosphere:

1. Minimize gasoline spills;

2. Clean up spills as expeditiously as practicable;

3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and

4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

11.8 Storage of Petroleum Liquids: External Floating Roof Vessels

11.8.1 Prohibitions

A. No person shall place, store or hold gasoline in a storage tank having a capacity of forty thousand (40,000) gallons or greater that is equipped with an external floating roof unless the vessel has been fitted with:

1. A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal), or

2. A closure or other device which controls volatile organic compound emissions by attaining or exceeding the requirements of § 11.8.1(B) of this Part for a secondary seal required under this regulation and approved by the Director and EPA.

B. All seal closure devices must meet the following requirements:

1. There are no visible holes, tears or other openings in the seal(s) or seal fabric,

2. The seal(s) is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall, and

3. For tanks having vapor mounted primary seals, the accumulated area of gaps exceeding 0.32 cm (1/8 in.) in width between the secondary seal and the tank wall shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 $in.^2$ per ft. of tank diameter), as determined by the method in § 11.8.3(C) of this Part.

C. All openings in the external floating roof, except for automatic bleeder vents, rim space vents and leg sleeves, must:

1. Be equipped with covers, seals or lids in the closed position except when the openings are in actual use, and

2. Provide projections below the liquid surface at all times.

D. Automatic bleeder vents must be closed at all times except when the roof is being floated off or being landed on the roof leg supports.

E. Rim vents shall be set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting.

F. Emergency roof drains shall be provided with slotted membrane fabric covers or equivalent covers which cover at least 90 percent (90%) of the area of the opening.

11.8.2 Inspection and Reporting Requirements

A. The owner or operator of a petroleum liquid storage vessel with an external floating roof subject to this regulation shall:

1. Perform routine inspections semiannually in order to ensure compliance with § 11.8 of this Part and the inspection of the secondary seal gap,

2. Measure the secondary seal gap annually in accordance with §§ 11.8.3(C)(1) and (2) of this Part when the floating roof is equipped with a vapor-mounted primary seal or liquid-mounted primary seal, except that measurements in riveted tanks shall not be made when the roof is floating at a level that places the secondary seal in contact with a horizontal rivet seam,

3. Maintain records at the facility of the results of the inspections required in § 11.8.2(A)(1) of this Part for a period of three (3) years after an inspection,

4. Provide copies of all records in § 11.8.2(A)(3) of this Part to the Director, upon verbal or written request, at any reasonable time.

5. Maintain records at the facility which report monthly throughput quantities, types of petroleum liquids stored, average monthly storage temperature, and true vapor pressures of the stored liquid.

11.8.3 Compliance Test Methods

A. The owner or operator of any volatile organic compound source required to comply with § 11.8 of this Part shall demonstrate compliance by the methods of this Section or an alternative method approved by the Director and EPA.

B. A person proposing to conduct a volatile organic compound emissions test shall notify the Director of the intent to test not less than fifteen (15) days before the proposed initiation of the tests so the Director may have the option to observe the test. The notification shall contain the information required by, and be in a format approved by, the Director.

C. Compliance with § 11.8.1(B)(3) of this Part shall be determined by:

1. Physically measuring 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 tank wall, and

2. Summing the area of the individual gaps.

11.9 Reid Vapor Pressure

A. No person shall store, sell, or supply as motor vehicle fuel at or from bulk gasoline terminals and bulk gasoline plants a gasoline having a Reid Vapor Pressure greater than 9.0 pounds per square inch, except as specified in § 11.9(B) of this Part, during the period May 1 through September 15 of each year.

1. No person shall deliver gasoline having a Reid Vapor Pressure greater than nine (9.0) pounds per square inch to a gasoline dispensing facility during the period May 1 through September 15 of each year.

2. No gasoline dispensing facility shall receive gasoline having a Reid Vapor Pressure greater than nine (9.0) pounds per square inch during the period May 1 through September 15 of each year.

B. No person shall store, sell, or supply as motor vehicle fuel at or from bulk gasoline terminals and bulk gasoline plants a gasoline-ethanol blend containing at least nine percent (9%) ethanol which has a Reid Vapor Pressure greater than ten (10.0) pounds per square inch during the period May 1 through September 15 of each year.

1. No person shall deliver a gasoline-ethanol blend containing at least nine percent (9%) ethanol which has a Reid Vapor Pressure greater than ten (10.0) pounds per square inch to a gasoline dispensing facility during the period May 1 through September 15 of each year.

2. No gasoline dispensing facility shall receive a gasoline-ethanol blend containing at least nine percent (9%) ethanol which has a Reid Vapor Pressure greater than ten (10.0) pounds per square inch during the period May 1 through September 15 of each year.

C. Sampling and testing of gasoline shall be in accordance with ASTM Method D323-15a "Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)," incorporated in § 11.2(C) of this Part, or any equivalent method approved by the Director and EPA.

11.10 Tank Truck Certification and Vapor Collection Systems

A. This regulation shall apply to all gasoline tank trucks equipped for gasoline vapor collection.

11.10.1 Prohibitions

A. No person shall allow a gasoline tank truck to be filled or emptied unless the gasoline tank truck:

1. Is tested annually according to the test procedure referenced in § 11.10.2 of this Part;

2. Sustains a pressure change of no more than .11 psi (3 inches of water) in five (5) minutes when pressurized to a gauge pressure of .65 psi (18 inches of water) or when evacuated to a gauge pressure of.22 psi (6 inches of water) during the testing required in § 11.10.1(A)(1) of this Part;

3. Is repaired by the owner or operator and retested within fifteen (15) days of testing if it does not meet the criteria of § 11.10.1(A)(2) of this Part;

4. Displays a sticker near the Department of Transportation Certification plate, which:

   a. Shows the date the gasoline tank truck last passed the test required in § 11.10.1(A)(1) of this Part;

   b. Shows the identification number of the gasoline tank truck; and,

   c. Expires not more than one (1) year from the date of the leak tight test.

B. No person shall unload gasoline into a storage tank at a gasoline dispensing facility subject to § 11.7.2 of this Part unless the following conditions are met:

1. All hoses are properly connected to the Stage I vapor recovery system;

2. The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect;

3. All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight, as defined in § 11.3(A)(24) of this Part;

4. All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the Stage I equipment on the gasoline dispensing facility's storage tank; and

5. All hatches on the tank truck are closed and securely fastened.

C. The owner or operator of a vapor collection system shall:

1. Design and operate the vapor collection system and the gasoline loading equipment in a manner that prevents:

   a. Gauge pressure from exceeding 0.65 psi (18 inches of water) and a vacuum from exceeding 0.22 psi (6 inches of water) in the gasoline tank truck;

   b. A reading equal to or greater than one hundred percent (100%) of the lower explosive limit, LEL, measured as propane, at 2.5 centimeters from any potential leak source when measured by the method referenced in § 11.10.2 of this Part during the loading or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals;

   c. Visible leaks during the loading and unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals; and,

2. Within fifteen (15) days, repair and retest a vapor collection, or control system that exceeds the limits in § 11.10.1(C)(1)(a) of this Part.

D. The Director may, at any time, monitor a gasoline tank truck, vapor collection system, or vapor control system, by the method referenced in § 11.10.2 of this Part, to confirm continuing compliance with §§ 11.10.1(A), (B) and (C) of this Part.

11.10.2 Compliance Test Methods

A. The owner or operator of a gasoline tank truck subject to this regulation shall, at their own expense, demonstrate compliance with § 11.10.1 of this Part by the methods of § 11.10.2(C) of this Part or an alternative method approved by the Director and EPA. 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 tank truck maintenance and testing and/or experience in the use of a combustible gas detector in the field of air pollution.

B. The owner or operator of a gasoline tank truck subject to this regulation shall notify the Director in writing of the date and location of the certification test at least ten (10) days before the anticipated test date.

C. Test procedure to determine compliance with § 11.10.1 of this Part must be consistent with the test procedure described in 40 C.F.R. § 60, Appendix A-8, Method 27, incorporated in § 11.2(D) of this Part.

D. Monitoring to confirm the continuing existence of leak tight conditions shall be consistent with the procedures described in Appendix B of the EPA document entitled "Control of Organic Compound Leaks from Gasoline Tank Trucks and

Vapor Collection Systems" (EPA 450/2-78-051), incorporated in § 11.2(A) of this Part, or an alternative method approved by the Director and EPA.

11.10.3 Recordkeeping and Reporting

A. An owner or operator subject to § 11.10 of this Part shall maintain records of all certification testing and repairs. The records must identify the gasoline tank truck, vapor collection system, or vapor control system; the date of repair; and, if applicable, the type of repair and the date of retest. The records must be maintained in a legible, readily available condition for at least two (2) years after the date of testing or repair was completed.

B. The records for certification tests required by § 11.10.3(A) of this Part, shall, as a minimum, contain:

1. The gasoline tank truck identification number;

2. The initial test pressure and the time of reading;

3. The final test pressure and the time of reading;

4. The initial test vacuum and the time of reading;

5. The final test vacuum and the time of reading;

6. At the top of each report page shall be the company name, and the date and location of the tests on that page; and,

7. Name, address and title of person conducting the test.

C. Copies of all records and reports under § 11.10.3 of this Part shall immediately be made available to the Director and/or EPA, upon verbal or written request, at any reasonable time.

11.11 Equivalence Approval

A. Any equivalence approval required by EPA in this regulation will not be effective until approved as a single source revision to the State Implementation Plan.