RULE 316. STORAGE AND TRANSFER OF GASOLINE. (Adopted 10/18/1971 and 9/30/1974, revised 6/7/1976, 6/14/1976, 10/1976 and 6/27/1977, readopted 10/23/1978, revised 6/11/1979, 1/17/1989, 7/11/1989, 7/10/1990, 11/13/1990, 12/14/1993, ~~and~~ 4/17/1997, and 1/15/ 2009)

A. Applicability

The provisions of this rule shall apply to the storage and transfer of gasoline.

B. Definitions

For the purposes of this rule, the following definitions shall apply:

~~1. "**Bottom loaded**": A gasoline delivery vessel shall be considered to be bottom loaded when the fuel transfer and vapor return lines have separate, independent, and dedicated attachments on the delivery vessel, when the inlet is flush with the bottom of the storage device, and when the delivery vessel hatches remain closed during fuel transfer.~~

~~2~~1. "**~~CARB~~Air Resources Board-certified vapor recovery system**": A vapor recovery system which has been certified by the ~~CARB~~Air Resources Board pursuant to Section 41954 of the Health and Safety Code.

2. "**Bottom loaded**": A gasoline delivery vessel shall be considered to be bottom loaded when the fuel transfer and vapor return lines have separate, independent, and dedicated attachments on the delivery vessel, when the inlet is flush with the bottom of the storage device, and when the delivery vessel hatches remain closed during fuel transfer.

3. "**Existing**~~"~~**:**~~"~~ Any gasoline storage and transfer facility operating, constructed, or under construction as of July 10, 1990.

4. "**E85**": A petroleum distillate/alcohol blend having a Reid vapor pressure of 4.0 pounds per square inch or greater and meeting the requirements of Title 13 California Code of Regulations, Section 2250 et seq., and as further defined in Title 12 California Code of Regulations Section 2250(b) and containing a minimum 15 percent of petroleum distillate and a maximum 85 percent of ethyl alcohol.

5. "**Flexible Fuel Vehicle**": A vehicle specially designed and manufactured to operate on either gasoline or on E85.

~~4~~6. "**Gasoline bulk plant**": An intermediate gasoline loading facility where delivery to the facility's storage containers and delivery from the facility is by truck.

~~5~~7. "**Gasoline delivery vessel**": A truck, trailer, or railroad car with a storage device containing gasoline, or gasoline vapors, used to transport fuel or other petroleum products.

~~6~~8. "**Gasoline terminal**": A gasoline loading facility where delivery to the facility's storage containers is by means other than truck.

~~7~~9. "**Gasoline vapors**": The reactive organic compounds in the displaced vapors including any entrained liquid gasoline.

~~8~~10. "**Leak free**": A leak rate of three (3) drops per minute or less of a liquid containing reactive organic compounds.

~~9~~11. "**Mobile vehicle fueling facility**": A gasoline container equipped with a dispensing nozzle or nozzles mounted on a truck, trailer or other conveyance and used to fill motor vehicle fuel tanks.

~~10~~12. "**Motor vehicle**": A vehicle as defined in Section 415 of the Vehicle Code.

~~11~~13. "**Motor vehicle fueling facility**": A facility where gasoline is transferred directly into the fuel tanks of motor vehicles.

14. "**Onboard Refueling Vapor Recovery**": A motor vehicle-based vapor recovery system required by Title 13 California Code of Regulations, Section 1978, or 40 Code of Federal Regulations Part 86.

~~12~~15. "**Phase I vapor recovery system**": A gasoline vapor recovery system or equipment which recovers the vapors generated during the transfer of gasoline from gasoline delivery vessels into gasoline storage containers.

~~13~~16. "**Phase II vapor recovery system**": A gasoline vapor recovery system or equipment which recovers the vapors generated during the fueling of motor vehicles from gasoline storage containers.

~~14~~17. "**Retail service station**": Any new or existing motor vehicle fueling facility subject to payment of California sales tax on gasoline sales.

~~15~~18. "**Submerged fill pipe**": Any fill pipe or discharge nozzle which meets any one of the following conditions:

a. If the storage container is filled from the top, the discharge opening must be entirely submerged when the liquid level is 6 inches above the bottom of the container.

b. If the storage container is filled from the side, the discharge opening must be entirely submerged when the liquid level is 18 inches above the bottom of the container.

~~16~~19. "**Storage container replacement**": Replacement of one or more gasoline storage containers or excavation of 50 percent or more of an existing facility's total underground liquid piping from the gasoline storage containers to the gasoline dispensers.

~~17~~20. "**Switch loading**": The loading of organic liquids with a Reid vapor pressure of less than 4.0 pounds into a delivery vessel where the previous load was gasoline.

~~18~~21. "**Vapor tight**": An emission of gaseous organic compounds which causes an appropriate analyzer sampling at a distance of one (1) centimeter from a source to register less than 10,000 parts per million, as methane, as determined by ~~EPA~~ Environmental Protection Agency Reference Method 21 (Determination of Volatile Organic Compound Leaks).

C. Requirements - Gasoline Storage Containers

1. Any person transferring, permitting the transfer, or providing equipment for the transfer of gasoline into any gasoline storage container which has 250 gallons or more capacity shall use a permanently installed submerged fill pipe for such transfer.

2. Any person transferring, permitting the transfer, or providing equipment for the transfer of gasoline from a gasoline delivery vessel into any storage container with 250 gallons or more capacity shall use a permanently installed ~~CARB~~Air Resources Board-certified Phase I vapor recovery system.

3. Any person transferring, permitting the transfer, or providing equipment for the transfer of gasoline from any container with 250 gallons or more capacity into any motor vehicle fuel tank with more than 5 gallons capacity shall use a permanently installed ~~CARB~~Air Resources

Board-certified Phase II vapor recovery system during the transfer. The Phase II vapor recovery system shall be certified to be at least 95 percent effective when used in conjunction with an ~~CARB~~Air Resources Board-certified Phase I vapor recovery system.

4. Any gasoline dispensing nozzle installed on a gasoline container subject to Section C.3 of this Rule shall be equipped with a hold-open latch except where prohibited by local ordinance, State or Federal regulation or the agency responsible for local fire control.

5. Any above ground gasoline storage container with 250 gallons or more but less than 40,000 gallons capacity shall be equipped with a pressure-vacuum relief valve with minimum pressure and vacuum settings of 90~~%~~ percent of the maximum safe pressure and vacuum ratings of the container.

6. Any above ground gasoline storage container with 40,000 gallons capacity or more shall be equipped with a vapor loss control device as described in Rule 326.E.3.

7. No person shall store any gasoline with a true vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions in any storage container with an internal floating roof, internal floating roof cover, or external floating roof.

D. Requirements - Gasoline Terminals

1. Any person transferring, permitting the transfer, or providing equipment for the transfer of gasoline into a gasoline delivery vessel at a gasoline terminal shall use an ~~CARB~~Air Resources Board-certified vapor recovery system. This vapor recovery system shall limit the ROC emissions to 0.08 pounds per 1000 gallons of gasoline loaded.

2. Any person transferring, permitting the transfer, or providing equipment for the transfer of gasoline into a gasoline delivery vessel shall ensure that loading is accomplished in such a manner that displaced gasoline vapors are vented only to the vapor recovery system. Measures shall be taken to insure that the loading device is leak free when it is not in use and to accomplish complete drainage before the loading device is disconnected.

3. Switch loading shall be subject to the requirements of Section D.1 of this rule.

4. Product transfer equipment shall be configured to require that all gasoline delivery vessels are bottom loaded.

E. Requirements - Gasoline Bulk Plants

1. Any person transferring, permitting the transfer, or providing equipment for the transfer of gasoline into a gasoline delivery vessel at a gasoline bulk plant shall use an ~~CARB~~Air Resources Board-certified vapor recovery system. This vapor recovery system shall limit the ROC emissions to 0.50 pounds per 1000 gallons of gasoline loaded.

2. Any person transferring, permitting the transfer, or providing equipment for the transfer of gasoline into a gasoline delivery vessel shall ensure that loading is accomplished in such a manner that displaced gasoline vapors are vented only to the vapor recovery system. Measures shall be taken to insure that the loading device is leak free when it is not in use and to accomplish complete drainage before the loading device is disconnected.

3. Switch loading shall be subject to the requirements of Section E.1 of this rule.

F. Requirements - Gasoline Delivery Vessels

1. Any gasoline delivery vessel manufactured and purchased after June 27, 1977 shall be equipped with a vapor recovery system approved by the ~~CARB~~Air Resources Board pursuant to Section ~~41692~~41962 of the State Health and Safety Code. The vapor tightness of such system shall be determined using ~~CARB~~the Air Resources Board-approved test method ~~Test Method 2-5~~ or shall meet the specifications for a "vapor-tight gasoline tank truck" specified in 40 CFR 60.501 (in conjunction with ~~EPA~~ Environmental Protection Agency Test Method 27).

2. Any gasoline delivery vessel loaded with gasoline at a gasoline terminal or gasoline bulk plant, equipped with a vapor recovery system as required by Section D or Section E of this rule, shall be certified (deemed vapor tight) annually by the ~~CARB~~Air Resources Board pursuant to Section ~~41692~~41962 of the State Health and Safety Code.

3. Any gasoline delivery vessel used to transfer gasoline into any storage container with 250 gallons or more capacity shall be certified (deemed vapor tight) annually by the ~~CARB~~ Air Resources Board pursuant to Section ~~41692~~41962 of the State health and Safety Code.

4. Any person transferring or permitting the transfer of gasoline into any gasoline delivery vessel shall use a submerged fill pipe or bottom loading.

G. Vapor Recovery System Operation and Maintenance Requirements

1. Any vapor recovery system or other equipment installed pursuant to any provision of this rule shall be maintained and operated in the same manner as when certified by the ~~CARB~~Air Resources Board.

2. All vapor recovery equipment shall be maintained in good working order and shall be leak free and vapor tight, except for the connection between the Phase II vapor recovery nozzle faceplate and the motor vehicle fill pipe during vehicle refueling.

3. Any vapor recovery system shall be maintained and operated in a manner that prevents the gauge pressure in a delivery vessel from exceeding 18 inches of water column or 6 inches of water vacuum.

4. No person shall use or permit the use of any Phase II system or any component thereof containing a defect identified in Title 17, California Code of Regulations, Section 94006, until it has been repaired, replaced, or adjusted as necessary to remove the defect. If District reinspection is required under Health and Safety Code Section 41960.2, use shall not be permitted until the District has authorized its use.

H. Test Methods

1. Compliance with the limits of Section D.1 shall be determined by ~~CARB~~Air Resources Board Test Method 203 or by performance test procedures specified in 40 CFR 60.503 (in conjunction with ~~EPA~~ Environmental Protection Agency Reference Methods 2A, 2B, 25A and 25B).

2. Compliance with the limits of Section E.1 shall be determined by ~~CARB~~Air Resources Board Test Method 202 or by performance test procedures specified in 40 CFR 60.503 (in conjunction with ~~EPA~~ Environmental Protection Agency Reference Methods 2A, 2B, 25A and 25B).

3. The vapor tightness of vapor recovery systems required by F.1 shall be determined using ~~CARB~~Air Resources Board Test Method ~~2-5~~ 204.1 or shall meet the specifications for a "vapor-tight gasoline truck~~:~~" specified in 40 CFR 60.501 (in conjunction with ~~EPA~~ Environmental Protection Agency Test Method 27).

4. The test method required by the Air Resources Board for the annual certification of cargo tanks is Air Resources Board Test Procedure 204.1. To receive an annual Air Resources Board

certification, cargo tanks operating in the State of California shall meet the requirements of the Air Resources Board Test Procedure 204.1. The United States Department of Transportation requires annual leakage tests of cargo tanks pursuant to the provisions in Title 49 CFR 180.407(c) and (h), which may include the use of the Environmental Protection Agency Test Method 27.

5. Compliance with the "leak free" and "complete drainage" requirements of Section D.2, E.2 and G.2 shall be determined by the procedures outlined in ~~CARB~~Air Resources Board Test Method 2-6.

I. Exemptions

1. Section C of this rule shall not apply to a transfer to a gasoline storage container used exclusively for wind machines in agricultural operations.

2. Sections C.2 and C.3 of this rule shall not apply to a transfer to or from a gasoline container used to fuel implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code if more than 50 percent of the annual throughput for the container is used to fuel implements of husbandry. Monthly records of container throughput shall be maintained for a period of two years after the end of each calendar year and shall be made available to the District upon request.

3. Section C.2 of this rule shall not apply to a transfer to completely fill a gasoline storage container for the purpose of leak testing, provided that the transfer does not exceed 1,000 gallons.

4. Section C.3 of this rule shall not apply to mobile vehicle fueling facilities

   a. which were purchased or for which a contract to purchase was signed prior to February 19, 1990. This exemption shall expire one year after a vapor return system (Phase II) for mobile fueling facilities is certified by the ~~CARB~~Air Resources Board.

   b. while being used to fuel vehicles responding to a duly proclaimed local emergency pursuant to Chapter II of the County Code.

5. Until January 1, 1992,

   a. Section E of this rule shall not apply to gasoline bulk plants with a daily throughput less than 20,000 gallons or an annual throughput less than 3,000,000 gallons (July 1 through June 30).

   b. To qualify for the exemption in Section I.5.a, above, the owner or operator of any gasoline bulk plant must submit a petition to the Air Pollution Control Officer not later than September 1 of each year stating:

      1) The maximum daily throughput and the annual throughput of gasoline at the bulk plant for the previous fiscal year (July 1 to June 30);

      2) The identity of all gasoline bulk plant customers who have storage containers of 250 or more gallons capacity, and the number and sizes of these storage containers; and,

      3) That the owner or operator does not transfer or permit the transfer of gasoline into any storage container of 250 gallons or more unless the container has a permanently installed submerged fill pipe.

   c. To qualify for the exemption in Section I.5.a, above, the owner or operator of any gasoline bulk plant must keep records of daily bulk plant throughput. Records shall be

maintained for a period of two (2) years, and shall be made available to the District upon request.

d. Section C.2 of this rule shall not apply to a transfer to a gasoline storage container at a motor vehicle fueling facility if all of the following conditions are true:

1) The capacity of the storage container is 5000 gallons or less; and,

2) The storage container receives gasoline exclusively from gasoline bulk plants that are exempt from Section E of this rule under the provisions of Section I.5.a and which satisfy the annual reporting requirements of Section I.5.b and the record keeping requirements of Section I.5.c.

e. Sections C.2, C.3 and C.5 shall not apply to storage containers which have capacities of 1500 gallons or less, except for those installed at retail service stations.

6. Sections C.2 and C.3 of this rule shall not apply to existing aboveground tanks at a motor vehicle fueling facility, with a calendar year throughput not greater than 5000 gallons per month or 50,000 gallons per year, until an ~~CARB~~Air Resources Board-certified vapor return system of the balance type (Phase I or Phase II) for the installed tank configuration is available. This exemption shall expire one year after a vapor return system is certified. Monthly records of storage container throughput shall be maintained for a period of two years after the end of each calendar year and shall be made available to the District upon request.

7. Section C.3 of this rule shall not apply to the following:

a. Transfer of gasoline from any storage tank into a vehicle fuel tank at any non-retail motor vehicle fueling facility where 100 percent of vehicles refueled are equipped with Onboard Refueling Vapor Recovery provided that the Phase II vapor recovery system, if previously installed, has been properly removed in a manner approved in writing by the Control Officer. Any person claiming this exemption shall maintain records of the make, model year, vehicle identification number and any other information indicating whether the vehicle is equipped with Onboard Refueling Vapor Recovery, for all vehicles refueled at such facility. These records shall be maintained on site for at least three years and be made available to the District upon request. In lieu of refueling records, the Control Officer may approve an alternative method for verifying or ensuring that only vehicles equipped with Onboard Refueling Vapor Recovery are refueled at such facility.

b. Transfer of E85 from any storage tank into a Flexible Fuel Vehicle fuel tank at any retail service station or non-retail motor vehicle fueling facility.

J. Compliance Schedules

1. Except as provided in Section J.2 below, the owner or operator of any existing gasoline storage and transfer facility subject to Section C of this rule shall comply with Section C of this rule by January 17, 1990. In addition, the owner or operator shall comply with the following schedule:

a. Apply for Authority to Construct not later than April 17, 1989.

b. Complete construction not later than September 17, 1989.

c. Arrange for District-approved performance testing and District inspection not later than October 17, 1989.

d. Apply for Permit to Operate not later than November 17, 1989.

2. The owner or operator of any existing gasoline storage and transfer facility exempted under Section I.5 of this rule shall comply with this rule by January 1, 1992. In addition, the owner or operator shall apply for an Authority to Construct not later than January 1, 1991.

3. The owner or operator of any new gasoline storage and transfer facility shall comply with the provisions of this rule at the time gasoline is first stored at the facility.

4. The owner or operator of any existing gasoline storage and transfer facility shall comply with Section C.4 of this rule by October 1, 1991. For the purpose of Regulation II and Regulation VIII, installation of hold open latches shall not be considered to be a modification.

5. The owner or operator of any mobile vehicle fueling facility exempted by Section I.4 shall comply with the provisions of Section C.3 by one year from the date that a vapor return system (Phase II) for a mobile vehicle fueling facility is certified by the ~~CARB~~Air Resources Board.

6. The owner or operator of any gasoline storage tank exempted by Section I.6 shall comply with the provisions of Section C.2 or C.3 by one year from the date that a vapor return system (Phase I or Phase II) for their tank configuration is certified by the ~~CARB~~Air Resources Board.