VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 70 - STORAGE AND TRANSFER OF GASOLINE

(Adopted 6/25/74, Revised 9/16/75, 4/13/76, 7/6/76, 3/8/77, 6/14/77, 3/27/79, 12/2/80, 7/5/83, 11/29/88, 5/4/93, 5/9/95, 5/13/97, 11/14/00, 11/11/03 effective 7/1/04, 3/10/09 effective 4/1/09)

A. Applicability

The provisions of this rule shall apply to the storage and transfer of gasoline. The storage of gasoline in containers with more than 40,000 gallons capacity shall also be regulated by the provisions of Rule 71.2, Storage of Reactive Organic Compound Liquids.

B. Requirements - Gasoline Storage Containers

1. No person shall transfer or permit the transfer of gasoline into any storage container with 250 gallons or more capacity unless a permanently installed submerged fill pipe with a connection that is free of leaks, is used.

2. No person shall transfer or permit the transfer of gasoline from a gasoline delivery vessel into any storage container with 250 gallons or more capacity unless a permanently installed California Air Resources Board (CARB) certified Phase I vapor recovery system, which prevents 95 percent of the displaced vapors from being released into the atmosphere, is used.

3. All vapor and liquid pipes, hoses, and lines extending from an underground gasoline storage container to a gasoline dispenser shall be gravity drained into the underground container or to another container.

4. No person shall install a coaxial Phase I vapor recovery system unless the system was certified by CARB after January 1, 1994.

5. No person shall install a Phase I vapor recovery system, unless the system is equipped with CARB certified poppetted drybreaks or spring-loaded vapor check valves on the vapor return coupler of the system.

6. All open vent pipes on gasoline storage container(s) with more than 250 gallons capacity shall be equipped with a CARB certified pressure-vacuum relief valve. Unless otherwise specified in the applicable CARB executive order, pressure relief shall be set at 3.0 ± 0.5 inches water column and vacuum relief shall be set at 8.0 ± 2.0 inches water column. Vent pipes may be manifolded, pursuant to the applicable CARB executive order, to a single pressure-vacuum relief valve. Pressure-vacuum relief valve(s) shall be properly installed and maintained in good operating order.

7. Prior to performing any major modification to a gasoline dispensing facility, a Permit to Operate shall be obtained from the District.

8. No person shall perform or permit the "pump-out" (bulk transfer) of gasoline from a storage container subject to this rule unless:

    a. The bulk transfer is performed using a vapor collection and transfer system capable of returning the displaced vapors to the stationary storage container, or

    b. The storage container will be removed or filled with water for testing.

9. No person shall transfer or permit the transfer of gasoline from any storage container with 250 gallons or more capacity into any motor vehicle fuel container with more than 5 gallons capacity unless a permanently installed CARB-certified Phase II vapor recovery system, which prevents 95 percent of the displaced vapors from being released into the atmosphere is used.

10. No person shall:

    a. Install any balance system vapor recovery nozzle unless a vapor check valve is located in the nozzle, and

    b. Allow the operation of a balance system with more than one check valve per nozzle and hose assembly.

11. If flexible tubing is used for the connection between the riser and dispenser cabinet connection, the material shall be listed by the Underwriters' Laboratory for use with gasoline and shall be capable of maintaining electrical continuity between the riser and dispenser.

12. No person shall sell, offer for sale, allow the operation of, or install a bellows-equipped vapor recovery nozzle unless it is equipped with an insertion interlock mechanism.

13. Any gasoline dispensing nozzle equipped with a vapor recovery system shall be equipped with a coaxial hose.

14. Liquid removal devices required by CARB executive orders shall be maintained to achieve a minimum liquid removal rate of five milliliters per gallon transferred. This standard shall apply at dispensing rates exceeding five gallons per minute, unless a higher removal rate is specified by the CARB executive order.

15. An owner/operator of any gasoline dispensing facility shall conspicuously post the following signs in the immediate gasoline dispensing area:

a. "NOZZLE" operating instructions.

b. "VCAPCD" toll-free telephone number.

c. A warning sign stating "DO NOT TOP OFF TANKS"

d. Required signs shall comply with one of the following:

(1) Decal signs shall be readable from a distance of 3 feet or more and shall be located adjacent to the dispenser price indicator (per gallon) on each side next to the driveway it serves.

(2) Pump toppers shall be double-back with one sign per island and shall be readable from a distance of 6 feet or more.

(3) Permanent (non-decal) signs shall be two single-sided or one double-sided sign(s) per two (2) dispensers and shall be readable from a distance of 6 feet or more.

e. A dispenser that is never used to fuel motor vehicles shall have a sign posted on it restricting its use for vehicles.

16. No person shall offer for sale, sell, or install any new or rebuilt vapor recover equipment unless the equipment is clearly identified or marked by the certified manufacturing company and/or the certified rebuilding company as per CARB specifications.

17. Standing gasoline in Phase I spill containment devices is prohibited.

18. The hanging hardware on Phase II vapor recovery systems, which includes, but is not limited to, coaxial hose, nozzles, retractors and hose castings, shall be inspected daily.

C. Requirements - Gasoline Bulk Plants and Gasoline Terminals

1. No person shall transfer or permit the transfer of gasoline into a gasoline delivery vessel at a gasoline bulk plant unless a permanently installed and properly connected CARB certified vapor recovery system is used. This vapor recovery system shall prevent 90 percent of the displaced vapors from being released into the atmosphere. This vapor recovery system shall have a maximum emissions factor of 0.84 lbs of hydrocarbon emitted per 1000 gallons of throughput.

2. No person shall transfer or permit the transfer of gasoline into a gasoline delivery vessel at a gasoline terminal unless a permanently installed and properly connected CARB-certified vapor collection and processing system is used. This

collection and processing system shall limit the ROC emissions to 0.08 pounds per 1000 gallons of gasoline loaded. Gasoline delivery vessels at gasoline terminals shall be bottom loaded only. The vapor processing portion of the vapor collection and processing system at gasoline terminals shall consist of one of the following:

a. An adsorption system, incineration system or condensation system.

b. A vapor handling system that directs all vapors to a fuel gas system.

c. Other equipment, approved in writing by the Air Pollution Control Officer (APCO), which has been demonstrated to limit the ROC emissions to 0.08 pounds per 1000 gallons of gasoline loaded as determined by CARB Test Method TP 203.1.

3. No person shall switch load at a gasoline bulk plant or at a gasoline terminal unless such transfer is made using a permanently installed CARB-certified vapor recovery system as required by Subsection C.1 or Subsection C.2 of this rule.

D. Requirements - Gasoline Delivery Vessels

1. No person shall unload gasoline from a gasoline delivery vessel to a storage container that is equipped with a Phase I vapor recovery system required by Subsection B.2 of this rule unless the gasoline delivery vessel is permanently equipped with a vapor recovery system that has been certified by CARB pursuant to State Health and Safety Code Section 41962. This certification must be verified annually by the State Board.

2. No person shall load gasoline into a gasoline delivery vessel at a gasoline bulk plant or terminal equipped with a vapor recovery system required by Subsection C.1 or Subsection C.2 of this rule unless the delivery vessel is permanently equipped with a vapor recovery system that has been certified by CARB pursuant to State Health and Safety Code Section 41962. This certification must be verified annually by the State Board.

3. No person shall open the hatch on any gasoline delivery vessel for visual inspection, unless:

a. The duration that the hatch is open for the visual inspection is no more than three minutes;

b. Gasoline transfer or pumping has been stopped for at least 3 minutes prior to opening; and

c. The hatch is closed before gasoline transfer or pumping is resumed.

E. 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 CARB. All vapor recovery equipment shall be maintained in good working order and shall not leak.

2. Phase II vapor recovery systems shall be maintained and operated with none of the defects listed in California Code of Regulations Section 94006, Subchapter 8, Chapter 1, Part III, of Title 17, adopted 9/15/08.

3. No person shall operate, or allow the operation of, a gasoline delivery vessel required to have a vapor recovery system by Subsections D.1 or D.2 of this rule, unless:

   a. The vapor recovery system is installed and maintained in compliance with the CARB requirements for certification, and

   b. A State of California decal is displayed attesting to the vapor integrity of the vessel per California Health and Safety Code Section 41962, and

   c. The pressure-vacuum relief valve is installed and set at 90 percent of the maximum, safe pressure and vacuum ratings of the vessel.

4. Any equipment that is not operating in compliance with this rule shall be tagged "Out of Order." Except during repair activity, that tag shall not be removed and the tagged equipment shall not be used, permitted to be used, or provided for use unless the tagged equipment has been fixed or replaced.

5. Any person storing or transferring gasoline shall follow good operating practices including but not limited to: preventing gasoline spills and leaks, storing gasoline in closed containers, and disposing of gasoline in compliance with all state and local regulations.

F. Exemptions

1. This rule shall not apply to gasoline storage containers used exclusively for wind machines in agricultural operations.

2. Subsections B.2, B.6, B.7, B.8, and B.9 of this rule shall not apply to gasoline storage containers with a capacity of less than 550 gallons that are located at non-retail service stations.

3. The requirement for Phase I vapor recovery in Subsection B.2, as well as the testing requirements in Section H shall not apply to:

a. Any gasoline storage container used exclusively for agricultural operations, less than or equal to 1500 gallons capacity, and located at a facility with a gasoline throughput that has not exceeded 10,000 gallons on a thirty day rolling average.

b. Stationary sources that have not exceeded a gasoline throughput of 6000 gallons per year.

c. Mobile refuelers

4. The requirement for Phase II vapor recovery in Subsection B.9, as well as the testing requirements in Section H shall not apply to:

a. Equipment used exclusively for the transfer or storage of gasoline for equipment other than motor vehicles.

b. Stationary sources that have not exceeded a gasoline throughput of 24,000 gallons per year and have not exceeded a gasoline throughput of 10,000 gallons on a thirty day rolling average.

c. Mobile Refuelers.

5. Subsections C.1 and C.3 shall not apply to gasoline bulk plants where the average daily gasoline throughput has not exceeded 4,000 gallons on a thirty day rolling average and the gasoline throughput has not exceeded 200,000 gallons on a twelve month rolling average.

6. Subsections C.1 and C.3 shall not apply to gasoline bulk plants that load exclusively to gasoline delivery vessels that service only storage containers that are not required to be equipped with Phase I vapor recovery systems.

7. Section H, Testing Requirements and Test Methods, shall not apply to any gasoline dispensing facility located on San Nicolas Island or Anacapa Island.

8. The requirement for Phase II vapor recovery in Subsection B.9, as well as the applicable testing requirements in Section H, shall not apply to any gasoline storage container with 250 gallons or more capacity that is used to fuel a motor vehicle fleet where no less than 95 percent of the motor vehicles fueled are equipped with Onboard Refueling Vapor Recovery (ORVR) systems. To qualify, the gasoline storage container must be owned by the vehicle fleet operator. This exemption shall not apply to facilities required under state law to have Phase II vapor recovery.

9. The requirement for Phase II vapor recovery in Subsection B.9, as well as the applicable testing requirements in Section H, shall not apply to any storage container with 250 gallons or more capacity that is used to distribute E85 fuel.

G. Recordkeeping Requirements

1. Any person claiming an exemption from the provisions of this rule based on gasoline throughput shall keep the following records to substantiate the exemption:

   a. Name, address, type of facility, and permit number (if applicable); and

   b. For an exemption from the provisions of Subsection B.2 of this rule, based on the provisions of Subsection F.3.a of this rule, records showing gallons of gasoline loaded for each gasoline delivery; or

   c. For an exemption from the provisions of Subsection B.2 of this rule, based on the provisions of Subsection F.3.b of this rule, monthly gasoline throughput; or

   d. For an exemption from the provisions of Subsections B.9, C.1 or C.3 of this rule, based on the provisions of Subsections F.4.b or F.5 of this rule, daily gasoline throughput.

2. Any person claiming an exemption from provisions of this rule based on container size, shall, upon the request of the APCO:

   a. Provide records documenting the container size at the time of purchase and installation, or

   b. Conduct measurements to verify the volume of the container.

3. Any person claiming an exemption from the provisions of Subsection B.9 of this rule, based on the provisions of Subsection F.8 of this rule, shall keep the following records to substantiate the exemption:

   a. Name, address, type of facility, and permit number (if applicable); and

   b. Records showing the make, model year, vehicle identification number, and license plate number (if available) of each motor vehicle fueled from the applicable gasoline storage tank and a statement certifying that an ORVR system is in place and functional on each vehicle.

4. Reports and records of testing conducted pursuant to Section H shall be maintained. These documents shall be dated and shall contain names, addresses,

and telephone numbers of the parties responsible for the system installation and/or testing.

5. A record of all maintenance conducted on any part of the vapor recovery system shall be maintained in chronological order showing dates, description and location of any equipment replaced, and a description of the system problem that required repair. The log shall also indicate the time period and duration of each malfunction of the system.

6. Records of daily inspections required in Subsection B.18 shall be maintained. Records shall include the date and time of the inspection, the equipment inspected, and the signature of the person conducting the inspection.

7. Records shall be made available to the Air Pollution Control Officer upon request and shall be a maintained for a period of two years.

H. Testing Requirements and Test Methods

1. Except as provided in Subsection H.8, all Phase II vapor recovery systems shall demonstrate static pressure performance in accordance with the performance specifications shown in CARB Test Procedure 201.3 or 201.3b, as applicable, using CARB Test Procedure 201.3 for underground containers or CARB Test Procedure 201.3b for aboveground containers, in accordance with the following schedule:

   a. Within 45 days of (1) commencing operations at a new facility or (2) completing any major modification, and

   b. For a facility that has exceeded a gasoline throughput of greater than or equal to 100,000 gallons per year, annually thereafter.

   c. For a facility that has not exceeded a gasoline throughput of 100,000 gallons per year:

      1) Annually at any facility equipped with a vacuum-assist Phase II vapor recovery system or

      2) At least once every two years at any facility equipped with a balance Phase II vapor recovery system.

   CARB Test Procedure 201.3 shall not be required for any vapor recovery system required by a CARB executive order to use a different test method to demonstrate static pressure integrity.

2. Except as provided in Subsection H.8, compliance with the dynamic pressure

performance standard of Phase II vapor recovery systems designated on the system's CARB executive order shall be determined using CARB Test Procedure 201.4 in accordance with the following schedule:

a. Within 45 days of (1) commencing operations at a new facility or (2) completing any major modification, and

b. For a facility that has exceeded a gasoline throughput of greater than or equal to 100,000 gallons per year, annually thereafter.

c. For a facility that has not exceeded a gasoline throughput of 100,000 gallons per year, at least once every four years thereafter.

The system back pressure limits shown in CARB TP 201.4 shall be replaced by those shown on the applicable CARB executive order. CARB Test Procedure 201.4 shall not be required for any vapor recovery system required by a CARB executive order to use a different test method to demonstrate dynamic pressure performance.

Dynamic pressure performance testing shall not be required for any aboveground gasoline storage container that (1) has a dispenser mounted directly to the container and (2) is equipped with a Phase II vapor recovery system that does not have a liquid trap at any location in the vapor path between the gasoline nozzle and the storage container vapor head space during gasoline dispensing. The APCO may require documents or engineering drawings verifying exemption from this testing requirement.

3. Compliance with the liquid removal rate requirement in Subsection B.14 shall be determined using CARB Test Procedure 201.6 in accordance with the following schedule:

a. Within 45 days of (1) commencing operations at a new facility or (2) completing any major modification, and

b. For a facility that has exceeded a gasoline throughput of greater than or equal to 100,000 gallons per year, annually thereafter.

c. For a facility that has not exceeded a gasoline throughput of 100,000 gallons per year, at least once every four years thereafter.

4. The efficiency of Phase I vapor recovery systems shall be determined using CARB Test Procedure 201.1 or 201.1.a, as applicable.

5. The control efficiency of vapor recovery systems at gasoline bulk plants, as specified in Subsection C.1, shall be determined using CARB Test Method TP-

202.1, "Determination of Emission Factors of Vapor Recovery Systems of Bulk Plants."

6. The efficiency of vapor collection and processing systems at gasoline terminals, as specified in Subsection C.2, shall be determined using CARB Test Method TP-203.1, "Determination of Emission Factors of Vapor Recovery Systems of Terminals."

7. Except as provided in Subsection H.8, compliance with the air-to-liquid volume ratio performance requirement designated on a CARB executive order shall be demonstrated for all vacuum assist nozzles using the test procedure specified in the executive order in accordance with the following schedule:

   a. Within 45 days of (1) commencing operations or (2) completing any major modification, and

   b. Annually thereafter.

8. A testing frequency required in a CARB executive order shall preempt the testing frequency required in any of Subsections H.1.b, H.1.c, H.2.b, H.2.C, H.3.b, H.3.c, or H.7.b, above, provided the CARB executive order requires more frequent testing and specifies a test method corresponding to that required in the applicable subsection preempted.

9. Tests not specified in this section but specified in the applicable CARB executive order shall be performed as specified in the applicable CARB executive order.

10. The results of any test required by either this rule or a CARB executive order shall be delivered by the permittee to the District, in final written report format, no later than 14 days after completion of the subject testing.

I. Violations

Failure to comply with any provision of this rule shall constitute a violation of this rule.

J. Definitions

1. "Appropriate Analyzer": A hydrocarbon analyzer that meets the requirements of EPA Reference Method 21 and is calibrated with methane.

2. "Balance System": A Phase II (Stage II) vapor recovery system that operates on the principle of vapor displacement.

3. "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 truck or container, when the inlet is flush with the container bottom, and when the truck and trailer hatches remain closed during fuel transfer.

4. "CARB-Certified Vapor Recovery System": A vapor recovery system or equipment that has been certified by the State Board pursuant to Section 41954 of the Health and Safety Code.

5 "CARB Executive Orders": Orders generated by the California Air Resources Board that document the requirements of specific vapor control equipment and procedures used in Phase I and II vapor control.

6. "Coaxial Hoses or Systems": Gasoline delivery hoses, pipes, or systems that have an inner tube through which gasoline liquid is delivered and an annulus around the inner tube through which vapors are recovered, or vice-versa.

7. "E 85 Fuel": A motor fuel that contains 85 percent ethanol and 15 percent gasoline.

8. "Fleet": A group of vehicles under common operation and control by a person, company, business, corporation, organization, public entity, or any combination thereof, and are dispatched from at least one location within the District. For the purpose of this rule, each of the following facilities shall be considered a fleet:

    a) Port-related new vehicle processors
    b) New and used automobile and light truck dealers
    c) Automobile and light truck rental facilities

9. "Gasoline": Any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater, which is sold or intended for sale for use in motor vehicles or engines and is commonly or commercially known or sold as gasoline.

10. "Gasoline Bulk Plant": A gasoline storage and distribution facility that delivers gasoline to commercial or retail accounts and has not exceeded an average daily throughput of 20,000 gallons of gasoline on a thirty day rolling average.

11. "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.

12. "Gasoline Terminal": A gasoline storage and distribution facility that delivers gasoline to gasoline bulk plants or to commercial or retail accounts, and has exceeded a daily throughput of 20,000 gallons of gasoline on a thirty day rolling average.

13. "Gasoline Vapors": The reactive organic compounds in the displaced vapors including any entrained liquid gasoline. (Revised 3/27/79)

14. "Insertion Interlock": Any certified mechanism that is an integral part of a bellows-equipped dispensing nozzle that prohibits the dispensing of fuel unless the bellows is compressed.

15. "Leak":

    a. The dripping at a rate of more than three (3) drops per minute of liquid containing reactive organic compounds; or

    b. An emission of gaseous reactive organic compound which causes an appropriate analyzer sampling one (1) centimeter from a source to register at least 10,000 ppm, as methane, as determined by EPA Reference Method 21.

    The following are exceptions to the above definition and are not considered by this rule to be leaks:

    c. Liquid leaks from a well maintained disconnecting transfer fitting of not more than 10 milliliters per disconnect, averaged over three disconnects.

    d. Gaseous emissions from pressure relief devices on containers when the process pressure exceeds the limit setting specified for the device.

    e. Gaseous emissions from the nozzle boot-vehicle interface on Phase II vapor recovery systems.

    f. Liquid drops or spit-backs from the nozzle boot-vehicle interface not caused by improper maintenance of the vapor recovery system. (The burden of proof for demonstrating the cause of these spit-backs is on the operator, and may be met by meeting the CARB certification criteria in the blockage and pressure drop tests.)

16. "Liquid Trap": A point along a gasoline vapor path where liquid gasoline can collect and block or impede the passage of gasoline vapors.

17. "Major Modification": The modification of an existing gasoline dispensing facility that makes it subject to the same requirements to which a new installation is subject.

    a) Modification of the Phase I system that involves the addition, replacement, or removal of an underground storage tank, or modification that causes the

tank top to be unburied, is considered a major modification of the Phase I system.

b) Either the replacement of the Phase II system or the modification of the Phase II system that involves the addition, replacement or removal of 50 percent or more of the buried vapor piping, or the replacement of dispensers, is considered a major modification of the Phase II system. The replacement of a dispenser is not a major modification when the replacement is occasioned by end user damage to a dispenser.

This definition applies only to Subsection B.7 and Section H of this rule and does not supersede the definition of major modification in CARB document D-200.

18. "Mobile Refueler": A gasoline delivery vessel equipped with a dispensing nozzle or nozzles used to fill motor vehicle fuel tanks.

19. "Onboard Refueling Vapor Recovery (ORVR)": a system built into a motor vehicle to recover and contain gasoline vapors before they reach the fuel filler spout, as required by California Code of Regulations, title 13, section 1978, or 40 Code of Federal Regulations Part 86.

20. "Phase I Vapor Recovery System": A gasoline vapor recovery system or equipment that recovers the vapors generated during the transfer of gasoline from delivery vessels into stationary storage containers.

21. "Phase II Vapor Recovery System": A gasoline vapor recovery system or equipment that recovers the vapors generated during the fueling of motor vehicles from stationary storage containers.

22. "Prior Scheduled Testing Date:" The date established by the District by which an air-to-liquid ratio performance test must be conducted at a facility pursuant to Rule 70 adopted on May 13, 1997.

23. "Rebuilt Equipment": Any component of a vapor recovery system that has undergone repair or replacement of any or all of its internal parts.

24. "Reid Vapor Pressure": The absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids, except liquefied petroleum gases, as determined by ASTM D323-89.

25. "Retail Service Station": Any new or existing motor vehicle fueling facility subject to the payment of California sales tax for gasoline sales.

26. "Submerged Fill Pipe": Any fill pipe or discharge nozzle that meets any one of the following conditions:

a. The discharge opening is entirely submerged when the liquid level is six inches above the bottom of the container.

b. When applied to a container that is loaded from the side, the discharge opening is entirely submerged when the liquid level is 18 inches above the bottom of the container.

c. When applied to a container that is loaded from the bottom, "bottom loaded", the discharge opening is entirely submerged when the liquid level is six inches above the bottom of the container.

27. "Switch Load": To transfer diesel fuel into any gasoline delivery vessel that was previously loaded with gasoline.

28. "Thirty Day Rolling Average": The arithmetic average of daily gasoline throughputs over any consecutive thirty day period.

29. "Top Off": The dispensing of gasoline to a motor vehicle or utility equipment fuel tank after the dispensing nozzle primary shutoff mechanism has engaged. The filling of those classes of vehicle tanks which, because of the configuration of the fill pipe, causes premature activation of the primary shutoff, shall not be considered topping off.

30. "Twelve Month Rolling Average": The arithmetic average of monthly gasoline throughputs over any consecutive twelve month period.

31. "Vacuum Assist System": Any Phase II vapor recovery system that utilizes a pump, blower, or other vacuum-producing device. Vacuum assist systems may also incorporate an incinerator to process any excess vapors generated by the collection system.

32. "Vapor Tight": The detection of less than 10,000 ppm hydrocarbon concentration, as determined by EPA reference Method 21, using an appropriate analyzer calibrated with methane.