



Air Pollution Control Board	
Greg Cox	District 1
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Bill Horn	District 5

## NOTICE OF WORKSHOP

### FOR DISCUSSION OF ADOPTION OF NEW RULES 61.3.1 - TRANSFER OF GASOLINE INTO STATIONARY UNDERGROUND STORAGE TANKS AND 61.4.1 – TRANSFER OF GASOLINE FROM STATIONARY UNDERGROUND STORAGE TANKS INTO VEHICLE FUEL TANKS

The San Diego County Air Pollution Control District (District) will hold a public meeting to consider proposed adoption of new Rules 61.3.1 – Transfer of Gasoline into Stationary Underground Storage Tanks and 61.4.1 – Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicle Fuel Tanks. Comments and questions concerning the proposal may be submitted in writing before, or made at, the workshop which is scheduled as follows:

**DATE:** Monday, September 13, 2004  
**TIME:** 1:30 PM – 3:30 PM  
**PLACE:** Al Bahr Shrine  
5440 Kearny Mesa Road  
San Diego, CA

*(Al Bahr is located in back of the Hampton Inn on Kearny Mesa Road.)*

Volatile Organic Compound (VOC) emissions from gasoline service stations are currently regulated by District Rules 61.3 (Transfer of Volatile Organic Compounds into Stationary Storage Tanks) and 61.4 (Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks) first adopted in 1977. In addition, the District implements the statewide Vapor Recovery Program mandated by the California Air Resources Board (CARB). In 2001, CARB promulgated Enhanced Vapor Recovery (EVR) regulations to improve the effectiveness and increase the stringency of its vapor recovery program at gasoline service stations. EVR regulations have since been amended and became effective in December 2003.

The District committed to adopt the EVR requirements in its current Regional Air Quality Strategy. In addition, existing Rules 61.3 and 61.4 have become seriously outdated and need significant revisions. Therefore, the District proposes to adopt new Rules 61.3.1 and 61.4.1 that incorporate the state EVR Program and further reduce VOC emissions from gasoline transfer and dispensing operations.

Proposed new Rule 61.3.1 applies to the transfer of gasoline from mobile transport tanks into any stationary underground storage tank with a capacity of 250 gallons or more (Phase I Vapor Recovery). Proposed new Rule 61.4.1 applies to the transfer of gasoline from stationary underground storage tanks into any motor vehicle fuel tank with a capacity greater than 5 gallons (Phase II Vapor Recovery).

Specifically, the proposed rules will:

- Specify applicability of and exemptions from each rule.

- Require gasoline emissions from a gasoline transfer and dispensing facility be controlled with CARB-certified Phase I (Rule 61.3.1) and Phase II (Rule 61.4.1) vapor recovery systems. The systems must be installed, operated, and maintained in accordance with the most recent applicable CARB certification procedures and CARB Executive Orders.
- Require the Phase I and II vapor recovery systems be equipped with CARB-certified components. All components must be clearly identified by a permanent identification showing the manufacturer's name, model number, and a serial number unless a component is exempted from such identification by CARB.
- Require that vapor recovery systems and associated components (except for components with an allowable leak rate) be maintained free of liquid and vapor leaks. Liquid leaks and vapor leaks are defined by the rules. Components with an allowable leak rate must operate within such rate.
- Specify emission control efficiency and corresponding emission factors for vapor recovery systems, consistent with CARB's standards.
- Require an Inspection and Maintenance (I&M) Program be implemented to ensure proper operating conditions of all components of the Phase I and Phase II vapor recovery systems. The I&M program must also ensure ongoing compliance with applicable District rules and permit conditions. Required inspection frequencies are specified depending on the facility gasoline throughput.
- Require vapor recovery systems be maintained free of defects as defined in Title 17 of the California Code of Regulations or as identified in the applicable CARB Executive Order. Prohibit use of components containing defects. Provide seven calendar days for repair, adjustment or replacement of any component or system that has been identified as not being in good condition or not operating properly, but which does not contain a defect. For good cause and upon request of a facility owner or operator, the District may allow an additional seven days for such repair, adjustment, or replacement.
- Require an initial compliance test and subsequent periodic compliance tests (at least annually). Persons conducting the tests must have a testing training certificate from the South Coast Air Quality Management District or from an alternative training program approved by the District.
- Require records be maintained of initial and periodic compliance tests and all inspections, repairs, and maintenance performed. Both rules specify minimum information to be included in repair logs and test records.
- Provide definitions of the major terms included in the rules.
- Provide compliance schedules for existing and new facilities. The Air Pollution Control Officer may revise compliance dates to coincide with later dates specified by CARB.

In addition, proposed new Rule 61.3.1 specifies connect/disconnect procedures for gasoline transfers from a cargo tank into an underground storage tank. Both the facility operator and

the person conducting the gasoline transfer are responsible for complying with these requirements.

In addition, proposed new Rule 61.4.1:

- Requires the Phase II vapor recovery system be compatible with the CARB certified Phase I system installed at the facility. By April 1, 2005, or a specified later date, the Phase II system must be CARB certified as compatible with Onboard Refueling Vapor Recovery (ORVR).
- Requires new or replacement dispensers to have only one hose and one nozzle for dispensing gasoline on each side. This requirement applies only if more than 50% of dispensers are replaced.
- Requires signs displaying nozzle operating instructions and a prohibition of topping off a vehicle fuel tank be conspicuously posted.
- Requires facilities dispensing more than 600,000 gallons of gasoline per year install a CARB-certified, In-Station Diagnostic system by specified dates.
- Provides a compliance schedule with a condition that the schedule may be revised to coincide with applicable later dates specified by CARB.

All existing and new facilities subject to proposed Rule 61.3.1 would have to comply with this rule's Phase I requirements according to a schedule specified in the rule with a final compliance date of April 1, 2005. Until this date, facilities must comply either with new Rule 61.3.1 or existing Rule 61.3. Facilities subject to new Rule 61.4.1 would have to comply with this rule after the date of adoption and according to the compliance schedule provided in the rule. Gasoline transfers into stationary aboveground storage tanks and into motor vehicle fuel tanks from stationary aboveground storage tanks would remain subject to Rules 61.3 and 61.4, as applicable, and would not be subject to proposed Rules 61.3.1 or 61.4.1.

If you would like to have a copy of proposed Rules 61.3.1 or 61.4.1, please access the District's website at [www.sdapcd.org](http://www.sdapcd.org) under Rules and Regulations, Public Workshop or call Luann Serbesku at (858) 650-4544. If you have any questions concerning the proposal, please call Angela Durr at (858) 650-4541, Natalie Zlotin at (858) 650-4540, or Steve Moore at (858) 650-4598.

MICHAEL R. LAKE, Assistant Director  
Air Pollution Control District

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# SAN DIEGO AIR POLLUTION CONTROL DISTRICT

## PROPOSED NEW RULE

Proposed new Rule 61.3.1 to read as follows:

### **RULE 61.3.1 TRANSFER OF GASOLINE INTO STATIONARY UNDERGROUND STORAGE TANKS** (Adopted & Effective *(date of adoption)*)

#### **(a) APPLICABILITY**

(1) Except as otherwise provided in Section (b), this rule is applicable to the transfer of gasoline from any mobile transport tank into any stationary underground storage tank with a capacity of 250 gallons (946 liters) or more at any gasoline transfer and dispensing facility.

(2) Transfer of gasoline from any mobile transport tank into any stationary underground storage tank that is located at a bulk plant or bulk terminal and is subject to the requirements of Rule 61.1 shall not be subject to this rule.

#### **(b) EXEMPTIONS**

The provisions of this rule shall not apply to the following:

(1) Transfer of gasoline into or from any stationary underground storage tank or any mobile transport tank used exclusively for fueling agricultural wind machines.

(2) Transfer of gasoline from any mobile transport tank into any stationary underground storage tank when conducted by the San Diego County Department of Weights and Measures.

(3) Transfer of gasoline from any mobile transport tank into any stationary underground storage tank with a capacity of 550 gallons (2,080 liters) or less and located at any non-retail gasoline transfer and dispensing facility.

#### **(c) DEFINITIONS**

Notwithstanding the definitions provided in Rule 61.0, for the purposes of this rule the following definitions shall apply:

(1) **“Adaptor or Coupler ”** means a fitting on a riser pipe that provides a leak-proof seal between the riser pipe and a delivery elbow during the gasoline delivery.

(2) **“Annual Gasoline Throughput”** means the total amount of gasoline dispensed during any calendar year at a gasoline transfer and dispensing facility.

(3) **“Annual Inspection”** means an inspection conducted once every 12 calendar months.

(4) **“Bulk Plant”** means any facility at which gasoline is received from mobile transport tanks for storage and is transferred into mobile transport tanks.

(5) **“Bulk Terminal”** means any primary distributing facility for delivering gasoline to bulk plants, service stations and other distribution points; and where delivery to the facility is by means other than by truck.

(6) **“CARB”** means California Air Resources Board.

(7) **“CARB Certification Procedure (CP)”** means a CARB issued document that provides performance standards and specifications for vapor recovery systems, and identifies test procedures for determining compliance with such standards and specifications.

(8) **“CARB Certified Phase I System or Equipment”** means a Phase I vapor recovery system, equipment or any component that has been certified by CARB pursuant to Section 41954 of the California Health and Safety Code.

(9) **“CARB Executive Order”** means a document issued by the Executive Officer of the California Air Resources Board that specifies the requirements for specific vapor control equipment and the procedures used in installing, maintaining, inspecting, or testing vapor recovery systems.

(10) **“CCR”** means California Code of Regulations.

(11) **“Cargo Tank”** means any container, including associated pipes and fittings that is used for the transportation of gasoline on any highway and is required to be certified in accordance with Section 41962 of the California Health and Safety Code.

(12) **“Delivery Elbow”** means a quick connect/disconnect type coupler that joins a hose from a cargo tank to a facility’s storage tank riser pipe.

(13) **“Existing Phase I Gasoline Transfer and Dispensing Facility”** means a facility in San Diego County whose construction was completed before July 1, 2001, and which is subject to the requirements of this rule.

(14) **“Gasoline”** means any petroleum distillate or 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 of the CCR, Section 2250 et seq.

(15) **“Gasoline Transfer and Dispensing Facility (GDF)”** means a stationary facility, consisting of one or more storage tanks and associated equipment, that receives, stores, and/or dispenses gasoline.

(16) **“Gasoline Vapor Control Efficiency (Volumetric Efficiency)”** means a control efficiency of the Phase I vapor recovery system (E) expressed as

$$E = (V_t - V_{vsi} / V_t) \times 100\%, \text{ where:}$$

$V_t$  = total volume of gasoline vapors returned to the cargo tank;

$V_{vsi}$  = total volume of gasoline vapors discharged to the atmosphere.

(17) **“Gasoline Vapors”** means organic compounds in vapor form displaced during gasoline transfer and dispensing operations, including any entrained liquid gasoline.

(18) **“Leak Detection Solution”** means any solution containing soap, detergent or similar materials that promote formation of bubbles at the site of any escaping vapors.

(19) **“Liquid Leak”** means any visible liquid leak of gasoline at a rate in excess of three drops per minute.

(20) **“Liquid Leak for Cargo Tanks ”** means a liquid leak from a gasoline line that is more than two milliliters liquid drainage per disconnect from a top loading operation, or more than ten milliliters liquid drainage per disconnect from a bottom loading operation. Such liquid drainage for disconnect operations shall be determined by computing the average drainage from three consecutive disconnects at any one permit unit.

Alternatively, a liquid leak for cargo tanks means a liquid leak from gasoline liquid or vapor lines during any single disconnect operation that is more than six milliliters liquid drainage per disconnect from a top loading operation, or more than 30 milliliters liquid drainage per disconnect from a bottom loading operation.

(21) **“Major Modification”** means a modification of the Phase I system that involves the addition, replacement, or removal of a stationary underground storage tank, or modification that causes the tank top to be unburied.

(22) **“Mobile Transport Tank”** means any cargo tank or trailer, railroad tank car, or tanker used to transport gasoline.

(23) **“Monthly Gasoline Throughput”** means the total amount of gasoline dispensed during any calendar month at a gasoline transfer and dispensing facility.

(24) **“New Phase I Gasoline Transfer and Dispensing Facility”** means a facility in San Diego County whose construction or major modification was completed on or after July 1, 2001, and which is subject to the requirements of this rule.

(25) **“Over-fill Prevention Device”** means a device designed to stop the delivery of gasoline to a storage tank to prevent the over-filling of the tank and potential spillage.

(26) **“Phase I Vapor Recovery System”** means a gasoline vapor recovery system or equipment that recovers the vapors generated during the transfer of gasoline from mobile transport tanks into stationary underground storage tanks.

(27) **“Phase II Vapor Recovery System”** means a gasoline vapor recovery system or equipment that recovers the vapors generated during the refueling of motor vehicles and from the storage of gasoline at the gasoline dispensing and transfer facility.

(28) **“Popetted Dry Break”** means a spring-loaded valve that prevents vapor from escaping through the vapor recovery riser pipe of a storage tank.

(29) **“Pressure/Vacuum Valve”** means a valve that is installed on the vent pipes of the gasoline storage tanks to relieve pressure or vacuum-build-up at preset values of pressure and vacuum.

(30) **“Reid Vapor Pressure”** means an absolute vapor pressure of gasoline or other volatile petroleum products at 100° F (37.8° C).

(31) **“Retail Gasoline Transfer and Dispensing Facility”** means any gasoline transfer and dispensing facility subject to the payment of California sales tax for the sale of gasoline.

(32) **“Riser Pipe”** means a pipe mounted on top of a stationary underground storage tank.

(33) **“Safety Features”** means all the features outlined in the applicable test method to ensure proper and safe testing, including but not limited to, pressure/vacuum valves, safety cones, ladders, and grounding equipment.

(34) **“Spill Box”** means an enclosed container around a Phase I gasoline vapor or liquid adaptor or both that is designed to collect gasoline spillage resulting from disconnecting the delivery hoses from the gasoline vapor or liquid adaptors.

(35) **“Stationary Underground Storage Tank”** means any tank, reservoir or other underground container that is used to store, but not transport, gasoline.

(36) **“Submerged Drop -Tube”** means any drop-tube which has its discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank. Submerged drop-tube, when applied to a tank which is loaded from the side, means any drop-tube which has its discharge opening entirely submerged when the liquid level is 18 inches above the bottom of the tank.

(37) **“Vapor Leak”** means a gasoline vapor concentration equal to 10,000 parts per million (ppm) or more as measured on a methane calibrated gas detector, at a distance of one centimeter from the source and in accordance with the US Environmental Protection Agency Test Method 21.

(38) **“Vapor Tight”** means an absence of a vapor leak or an absence of soap bubbles as indicated by a leak detection solution, as applicable, for a component without an allowable leak rate.

(39) **“Vapor Return Hose”** means a part of the Phase I vapor recovery system which carries gasoline vapors from the stationary underground storage tank into the unloading cargo tank.

(40) **“Vent Pipe”** means any pipe which is designed to convey an air/gasoline vapor mixture from the vapor recovery system to the atmosphere.

(d) **EQUIPMENT AND OPERATION REQUIREMENTS**

A person shall not operate any gasoline transfer and dispensing facility unless all applicable portions of the following requirements are met by the dates specified in Section (i) of this rule:

(1) Each stationary underground storage tank is equipped with a CARB certified permanent submerged drop-tube.

(2) Each stationary underground storage tank is equipped with a CARB certified Phase I vapor recovery system that has a minimum control efficiency of 98.0% by volume and a mass emission factor for systems with vapor processors not exceeding 0.15 pounds of gasoline vapors per 1,000 gallons of gasoline dispensed.

(3) The Phase I vapor recovery system and associated components are installed, maintained, and operated in accordance with the most recent applicable CARB certification procedures and CARB Executive Orders. All components of the CARB certified Phase I vapor recovery system are clearly identified by a permanent identification showing the manufacturer's name, model number and a unique serial number unless the component is specifically exempt from this requirements by CARB.

(4) When required by the applicable CARB Executive Order the Phase I vapor recovery system is equipped with:

(i) CARB certified gasoline vapor and liquid anti-rotational couplers or rotatable adaptors. Each gasoline vapor and liquid rotatable adaptor shall have a static rotational torque not to exceed 108 pound-inch (9 pound-foot); and

(ii) CARB certified poppeted dry breaks or other CARB certified poppeted fittings on the vapor return coupler that are vapor tight when closed; and

(iii) CARB certified pressure/vacuum (P/V) valve(s) on the stationary underground storage tank vent pipe(s). The tank vent pipes shall be manifolded when required by the most recent applicable CARB Executive Order; and

(iv) CARB certified spill boxes each having an integral drain valve or other devices that are certified by CARB to return spilled gasoline to the stationary underground storage tank. Each spill box shall be maintained free of standing gasoline and free of any debris that may interfere with the seating of the drain valve. Spill boxes used exclusively for Phase I vapor connections shall not have drain valves.

(5) The Phase I vapor recovery equipment and associated components except for components with an allowable leak rate as specified by the most recent applicable CARB Executive Order and Certification Procedure, are maintained free of liquid leaks and are vapor tight. Components with an allowable leak rate shall operate within such rate.

(6) During a gasoline transfer from a cargo tank to any stationary underground storage tank each liquid gasoline delivery hose is connected or disconnected only while the associated vapor return hose is connected to the cargo tank and the storage tank vapor adaptor and is functional. This requirement shall apply to the owner/operator of the gasoline transfer and dispensing facility and to any person conducting the gasoline transfer.

(7) During a gasoline transfer from a cargo tank to any stationary underground storage tank there are no liquid leaks from the Phase I gasoline vapor return hose and liquid gasoline delivery hose. During the disconnection of either the vapor return hose or liquid gasoline delivery hose there are no liquid leaks as defined in Subsection (c)(20) of

this rule. This requirement shall apply to the owner/operator of the gasoline transfer and dispensing facility and to any person conducting the gasoline transfer.

**(e) INSPECTION AND MAINTENANCE PROGRAM**

An owner/operator of any gasoline transfer and dispensing facility shall implement an inspection and maintenance program sufficient to ensure the proper operation of the Phase I vapor recovery system. The program shall include at a minimum, the applicable portions of the following:

(1) A periodic inspection to be conducted with a frequency as specified in Table 1 to ensure proper operating conditions of all components of the Phase I vapor recovery system, including, but not limited to:

- (i) All stationary underground storage tank fill caps and gaskets, to verify the components are in place and in good condition; and
- (ii) All stationary underground storage tank poppeted dry breaks, gasoline vapor and liquid adaptors, to verify they are operable and sealing properly; and
- (iii) All stationary underground storage tank spill boxes, to verify there is no standing gasoline or debris in the spill boxes and that drain valves are seating properly.

**Table 1**

Type of Gasoline Dispensing Facility	Frequency of Inspection
Retail	Once per calendar week
Non-Retail (with Phase I and II)	Once per calendar week
Non-Retail (with Phase I only)	Once per calendar month

(2) An annual inspection to ensure compliance with all applicable District rules and regulations, and all permit conditions. The inspection shall verify that:

- (i) The District permit is current and posted;
- (ii) The facility complies with all permit conditions;
- (iii) The Phase I vapor recovery system is properly installed and complies with the most recent applicable CARB certification procedures;
- (iv) All stationary underground storage tanks have gasoline submerged drop-tubes installed, not damaged, and the distance between the highest level of each discharge opening of the submerged drop-tube and the bottom of the associated storage tank does not exceed six inches; and
- (v) The vent pipes are equipped with the required pressure/vacuum valves and each such valve is properly installed and functions in accordance with the most recent applicable CARB Executive Order.

In addition, the inspection of components specified in Subsections (e)(2)(iv) and (e)(2)(v) above shall be conducted each time the specified components are removed or replaced for any purpose.

(3) Maintenance Procedures

(i) Except as provided in Subsection (e)(3)(ii) below, any component, device or system identified and recorded by the owner/operator as not being in good condition or not operating properly during the inspection specified above shall be repaired, replaced, or adjusted within seven calendar days of detection in a manner that will bring the facility into compliance with this rule and the most recent applicable CARB Executive Orders. Upon request and for good cause, the Air Pollution Control Officer may allow an additional seven calendar days for the repairs, replacements, or adjustments specified above to be made; and

(ii) Any component, device or system having a defect as defined in Title 17 of the CCR or identified in the most recent applicable CARB Executive Orders shall not be used.

(4) Any additional inspection and alternative maintenance procedures that may be required by the most recent applicable CARB Executive Orders and the Installation and Maintenance Manuals for the Phase I vapor recovery system as approved by CARB.

(f) **SOURCE TESTING**

(1) Within 60 calendar days of the installation date of a new or modified gasoline transfer and dispensing facility, an initial compliance source test shall be conducted as required by the applicable District Authority to Construct and the most recent applicable CARB Executive Orders.

(2) Periodic compliance source tests shall be conducted at least once every 12 months, or more frequently as determined necessary by the Air Pollution Control Officer to ensure compliance with this rule. The source tests shall be conducted in accordance with the most recent applicable CARB Executive Orders and CARB Certification Procedures.

(3) Any person conducting the tests specified in Subsections (f)(1) and (f)(2) above shall have completed the South Coast Air Quality Management District's orientation class for testing and any subsequently required refresher classes or alternative training approved by the Air Pollution Control Officer. Such person shall have available to the District, at the time of the test, the following:

(i) A copy of a current certificate from the South Coast Air Quality Management District or from other approved training; and

(ii) Records of calibrations performed as required by the applicable test procedures.

**(g) RECORDKEEPING**

An owner/operator of any gasoline transfer and dispensing facility shall maintain at a minimum the following information as applicable:

- (1) Records of inspections performed as required by Section (e) of this rule.
- (2) Records of all malfunctioning components, including the date such components were identified or repaired during the inspection and maintenance.
- (3) Repair logs which include at a minimum:
  - (i) Date of repair;
  - (ii) The name of the person(s) who performed the repair, and if applicable, the name, address, and phone number of the person's employer;
  - (iii) Description of repair or maintenance performed;
  - (iv) Identification of each component that was repaired, maintained, or removed;
  - (v) Identification of each component that was installed as replacement, if applicable; and
  - (vi) Receipts for parts used in the repair and, if applicable, work orders which include the name and signature of the person responsible for performing the repairs.
- (4) Records of initial and periodic compliance source tests, which include at a minimum:
  - (i) Date and time of each test;
  - (ii) Name, affiliation, address, and phone number of the person(s) who performed the test;
  - (iii) For a retest following a failed initial or periodic compliance source test, description of repairs performed; and
  - (iv) Copies of all test reports, including test equipment calibration date(s), test results and failed test data, in District-approved format, and for a test that fails, a description of the reasons for the test failure.
- (5) Monthly gasoline throughput records.

All information specified in Subsections (g)(1) through (g)(5) above, shall be maintained on site for a period of at least three years. The most recent applicable CARB Executive Orders, and the Installation and Maintenance Manuals for the Phase I vapor recovery system approved by CARB, shall be maintained on site at all times. All information shall be made available to the District upon request. Records for gasoline transfer and dispensing facilities that are unmanned

may be kept at an alternative location approved in writing by the Air Pollution Control Officer. Receipts for parts and work orders for repairs as specified in Subsection (g)(3)(vi) above need not be maintained on site. Such receipts and work orders shall be provided within 14 calendar days of the District's request.

**(h) TEST METHODS**

- (1) The control efficiency of Phase I vapor recovery systems shall be determined in accordance with the CARB Test Method TP-201.1 – Volumetric Efficiency of Phase I Vapor Recovery Systems, or the most recent applicable test method approved by CARB.
- (2) The mass emission factor for systems with processors shall be determined in accordance with the CARB Test Method TP-201.1A – Emission Factor for Phase I Systems at Dispensing Facilities or the most recent applicable test method approved by CARB.
- (3) The static torque of gasoline vapor recovery and liquid adaptors shall be determined in accordance with TP-201.1B - Static Torque of Rotatable Phase I Adaptors or the most recent applicable test method approved by CARB.
- (4) Component leak rates, pursuant to Subsection (d)(5) of this rule, shall be determined in accordance with the most recent applicable test methods, test procedures, and certification procedures approved by CARB.
- (5) The Reid Vapor Pressure shall be determined in accordance with the American Society for Testing and Materials (ASTM) Test Method D323-99a, or its most current version.

**(i) COMPLIANCE SCHEDULE**

- (1) Existing gasoline transfer and dispensing facilities shall comply with the following increments of progress:
  - (i) By six months after the date of adoption, comply with all applicable requirements of the Inspection and Maintenance Program and Recordkeeping specified in Sections (e) and (g) of this rule.
  - (ii) By April 1, 2005, be in compliance with all requirements of Section (d) of this rule.
- (2) Until April 1, 2005, all existing gasoline transfer and dispensing facilities that are not in compliance with this rule shall comply with all applicable requirements of Rule 61.3.
- (3) Any new gasoline transfer and dispensing facility shall comply with all provisions of this rule upon startup.

# **SAN DIEGO AIR POLLUTION CONTROL DISTRICT**

## **PROPOSED NEW RULE**

Proposed new Rule 61.4.1 to read as follows:

**RULE 61.4.1    TRANSFER OF GASOLINE FROM STATIONARY  
UNDERGROUND STORAGE TANKS INTO  
VEHICLE FUEL TANKS** (Adopted and Effective: *(date of adoption)*)

**(a)    APPLICABILITY**

This rule is applicable to the transfer of gasoline from stationary underground storage tanks into any motor vehicle fuel tank with a capacity greater than 5 gallons (18.9 liters) at the following gasoline transfer and dispensing facilities:

- (1) Any retail gasoline transfer and dispensing facility where gasoline is dispensed into motor vehicle fuel tanks from any stationary underground storage tank with a capacity of 250 gallons (946 liters) or more, and
- (2) Any non-retail gasoline transfer and dispensing facility where:
  - (i) Gasoline is dispensed into motor vehicle fuel tanks from any stationary underground storage tank with a capacity greater than 550 gallons (2,080 liters), and
  - (ii) More than 2,000 gallons (7,570 liters) of gasoline are transferred into motor vehicle tanks in any calendar month on the parcel of land where the gasoline transfer and dispensing facility is located.

**(b)    EXEMPTIONS**

The provisions of this rule shall not apply to the following:

- (1) Transfer of gasoline from any intermediate refueler into a motor vehicle fuel tank.
- (2) Transfer of gasoline into any vehicles performing emergency work necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from imminent exposure to danger or damage.
- (3) Transfer of gasoline from any stationary underground storage tank that is used primarily in the fueling of aircraft and/or intermediate aircraft refuelers, or boats.
- (4) Transfer of gasoline from any stationary underground storage tank at any non-retail gasoline transfer and dispensing facility located on a parcel of land on which not more than 2,000 gallons (7,570 liters) are transferred into motor vehicle fuel tanks during any calendar month. Any person claiming this exemption shall maintain gasoline throughput records for each calendar month. These records shall be maintained onsite for at least three years and be made available to the District upon request.

(c) **DEFINITIONS**

Notwithstanding the definitions provided in Rule 61.0, for the purpose of this rule the following definitions shall apply:

- (1) **“Annual Gasoline Throughput”** means the total amount of gasoline dispensed during any calendar year at a gasoline transfer and dispensing facility.
- (2) **“Annual Inspection”** means an inspection conducted once every 12 calendar months.
- (3) **“Balance System”** means a CARB certified Phase II vapor recovery system that operates on the principle of vapor displacement.
- (4) **“Bootless Nozzle”** means a type of vapor recovery nozzle that does not have a boot over a length of the nozzle spout.
- (5) **“Breakaway Coupling”** means a component attached to a liquid/vapor coaxial hose and which allows the safe separation of the hose from the gasoline dispenser or the hose from the dispensing nozzle in the event of a forced removal such as a “driveoff.”
- (6) **“CARB”** means California Air Resources Board.
- (7) **“CARB Certification Procedure (CP)”** means a CARB issued document that provides performance standards and specifications for vapor recovery systems, and identifies test procedures for determining compliance with such standards and specifications.
- (8) **“CARB Certified Phase II System or Equipment”** means a Phase II vapor recovery system, equipment or any component that has been certified by CARB pursuant to Section 41954 of the California Health and Safety Code.
- (9) **“CARB Executive Order”** means a document issued by the Executive Officer of the California Air Resources Board that specifies the requirements for specific vapor control equipment and the procedures used in installing, maintaining, inspecting, or testing vapor recovery systems.
- (10) **“CCR”** means California Code of Regulations.
- (11) **“Coaxial Hose”** means a hose that contains two passages, one within the other. One of the passages dispenses liquid gasoline into a motor vehicle fuel tank while the other passage carries gasoline vapors from the motor vehicle fuel tank into the stationary underground storage tank.
- (12) **“EVR”** means Enhanced Vapor Recovery.

(13) “**Existing Phase II Gasoline Transfer and Dispensing Facility**” means a facility in San Diego County whose construction was completed before (EVR Phase II effective date), and which is subject to the requirements of this rule.

(14) “**Faceplate**” means a soft donut-type piece attached to a boot of a vapor recovery nozzle so that a tight seal with a motor vehicle fill pipe can be achieved while gasoline is being dispensed.

(15) “**Gasoline**” means any petroleum distillate or 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 of the CCR, Section 2250 et seq.

(16) “**Gasoline Dispenser (Dispenser)**” means a gasoline dispensing unit used for housing the aboveground gasoline and vapor recovery piping, gasoline meters, and hangers for the gasoline-dispensing nozzles when they are not in use.

(17) “**Gasoline Transfer and Dispensing Facility**” means a stationary facility, consisting of one or more storage tanks and associated equipment, that receives, stores, and/or dispenses gasoline.

(18) “**Gasoline Vapors**” means organic compounds in vapor form displaced during gasoline transfer and dispensing operations, including any entrained liquid gasoline.

(19) “**Hold-Open Latch**” means a device which is an integral part of the dispensing nozzle and is manufactured specifically for the purpose of dispensing gasoline without requiring the user’s physical contact with the nozzle during fueling operations.

(20) “**In Station Diagnostics (ISD)**” means equipment that provides monitoring of critical emission-related vapor recovery system parameters and components, and alerts the station operator when a failure mode is detected so that corrective action can be taken.

(21) “**Intermediate Refueler**” means a mobile transport tank used primarily in the fueling of vehicle, boat or aircraft fuel tanks.

(22) “**Leak Detection Solution**” means any solution containing soap, detergent or similar materials that promote formation of bubbles at the site of any escaping vapors.

(23) “**Liquid Leak**” means any visible liquid leak of gasoline at a rate in excess of three drops per minute.

(24) “**Major Modification**” means a modification of a Phase II vapor recovery system that includes the addition, replacement, or removal of 50 percent or more of the buried vapor piping, or the replacement of all existing dispensers. Replacement of a dispenser is not a major modification when such replacement is due to damage to a dispenser. Phase II system upgrades exclusively to make a system ORVR compatible do not constitute a major modification.

(25) **“Mobile Transport Tank”** means any cargo tank or trailer, railroad tank car, or tanker used to transport gasoline.

(26) **“Monthly Gasoline Throughput”** means the total amount of gasoline dispensed during any calendar month at a gasoline transfer and dispensing facility.

(27) **“New Phase II Gasoline Transfer and Dispensing Facility”** means a facility in San Diego County whose construction or major modification was completed on or after (EVR Phase II effective date), and which is subject to the requirements of this rule.

(28) **“Nozzle Boot”** means a flexible device around the spout of some vapor recovery nozzles, utilized to capture the vapor displaced from a motor vehicle.

(29) **“On-Board Refueling Vapor Recovery (ORVR)”** means a motor vehicle-based vapor recovery system required by Title 13 of the CCR, Section 1978, or 40 Code of Federal Regulations Part 86.

(30) **“Parcel of Land”** means a contiguous quantity of land in the possession of or owned by, or recorded as the property of the same person.

(31) **“Phase II Vapor Recovery System”** means a gasoline vapor recovery system or equipment that recovers the vapors generated during the refueling of motor vehicles and from the storage of gasoline at the gasoline dispensing and transfer facility.

(32) **“Reid Vapor Pressure”** means an absolute vapor pressure of gasoline or other volatile petroleum products at 100° F (37.8° C).

(33) **“Retail Gasoline Transfer and Dispensing Facility”** means any gasoline transfer and dispensing facility subject to the payment of California sales tax for the sale of gasoline.

(34) **“Safety Features”** means all the features outlined in the applicable test method to ensure proper and safe testing, including but not limited to, pressure/vacuum valves, safety cones, ladders, and grounding equipment.

(35) **“Stationary Underground Storage Tank”** means any tank, reservoir or other underground container that is used to store, but not transport, gasoline.

(36) **“Summer Fuel”** means gasoline that is required to comply with the requirements of Title 13 of the CCR, Section 2262.4.

(37) **“Topping Off ”** means an attempt of a person filling up a motor vehicle to dispense gasoline after the dispensing nozzle primary shut-off mechanism has engaged. The filling of a motor vehicle tank that, because of the configuration of the fill pipe, causes premature activation of the primary shutoff mechanism shall not be considered topping off.

(38) **“Vacuum-Assist System”** means a CARB certified Phase II vapor recovery system utilizing a vacuum-producing device such as a compressor or turbine to create a vacuum during gasoline dispensing to capture or assist in the capture of gasoline vapors.

(39) **“Vapor Guard”** means a device that is installed at the base of a bootless vapor recovery nozzle spout to enhance the effectiveness of vapor collection.

(40) **“Vapor Leak”** means a gasoline vapor concentration equal to 10,000 parts per million (ppm) or more as measured on a methane calibrated gas detector, at a distance of one centimeter from the source and in accordance with the U.S. Environmental Protection Agency Test Method 21.

(41) **“Vapor Recovery Nozzle (Nozzle)”** means a nozzle that is capable of collecting gasoline vapors while it dispenses gasoline.

(42) **“Vapor Tight”** means an absence of a vapor leak or an absence of soap bubbles as indicated by a leak detection solution, as applicable, for a component without an allowable leak rate.

(43) **“Winter Fuel”** means gasoline that is not required to comply with the regulations that are applicable to summer fuel.

**(d) EQUIPMENT AND OPERATION REQUIREMENTS**

A person shall not operate any gasoline transfer and dispensing facility unless all of the applicable portions of the following conditions are met:

(1) A CARB certified Phase II vapor recovery system is installed and is compatible with the CARB certified Phase I system installed at the facility.

(2) By the applicable dates specified in Subsections (i)(1)(iv) and (i)(3) of this rule, the Phase II vapor recovery system has:

(i) For summer fuel, a gasoline vapor control efficiency of at least 95% by weight and a mass emission factor not exceeding 0.38 pounds of gasoline vapors per 1,000 gallons of gasoline dispensed; and

(ii) For winter fuel, a gasoline vapor control efficiency of at least 95% by weight or a mass emission factor not exceeding 0.38 pounds of gasoline vapors per 1,000 gallons of gasoline dispensed.

(3) The Phase II vapor recovery system and associated components are installed, maintained, and operated in accordance with the most recent applicable CARB certification procedures and CARB Executive Orders. All components of the CARB certified Phase II vapor recovery system are clearly identified by a permanent identification showing the manufacturer’s name, model number and a unique serial number unless the component is specifically exempt from this requirements by CARB.

(4) The Phase II vapor recovery system and associated components are maintained free of defects as defined in Title 17 of the CCR or identified in the most recent applicable CARB Executive Order.

(5) The Phase II vapor recovery system and associated components except for components with an allowable leak rate as specified by the most recent applicable CARB Executive Order and Certification Procedure, are maintained free of liquid leaks and are vapor tight. Components with an allowable leak rate shall operate within such rate.

(6) All liquid removal devices, when required to be installed per the most recent applicable CARB Executive Order, achieve a minimum liquid removal rate of at least 5 milliliters per gallon of gasoline dispensed or a minimum liquid removal rate specified in the most recent applicable CARB certification procedure.

(7) The facility has conspicuously posted:

(i) The nozzle operating instructions and the phone number to call if the nozzle is malfunctioning; and

(ii) A warning sign stating that topping off is prohibited and may result in spillage of gasoline.

(8) By the applicable dates specified in Subsections (i)(1)(ii) and (i)(3) of this rule, the Phase II vapor recovery system is CARB certified to be compatible with Onboard Refueling Vapor Recovery (ORVR).

(9) If the facility dispenses more than 600,000 gallons of gasoline in any calendar year, the facility is equipped with a CARB certified In-Station-Diagnostic system by the applicable dates specified in Subsections (i)(1)(v), (i)(1)(vi) and (i)(3) of this rule.

(10) Each new or replacement dispenser is equipped with only one hose and nozzle for dispensing gasoline on each side. This requirement does not apply to existing dispensers at an existing gasoline transfer and dispensing facility unless the facility replaces more than 50% of the dispensers. Dispensers that must be replaced due to damage resulting from an accident or vandalism may be replaced with the same type of dispensers.

**(e) INSPECTION AND MAINTENANCE PROGRAM**

An owner/operator of any gasoline transfer and dispensing facility shall implement an inspection and maintenance program sufficient to ensure the proper operation of the Phase II vapor recovery system. The program shall include at a minimum, the applicable portions of the following:

(1) A periodic inspection to be conducted with a frequency as specified in Table 1 to ensure proper operating conditions of the Phase II vapor recovery system including, but not limited to, all gasoline dispensing equipment. The inspection shall verify that:

- (i) Vapor guards (if required) are intact;
- (ii) Breakaway couplings have not separated;
- (iii) All nozzle vapor boots (if required) are free of holes, slits and rips that are identified as defects; and
- (iv) Vapor recovery hoses, swivels, nozzles, hold-open latches, and faceplates are in good working condition and all gasoline and vapor recovery system components outside each dispenser are free of liquid leaks and defects as specified in Subsection (d)(4) of this rule.

**Table 1**

Type of Gasoline Dispensing Facility	Annual Gasoline Throughput (gallons)	Frequency of Inspection
Retail	$\geq 750,000$	Once per day
Retail	$< 750,000$	Once per day (excluding weekends and holidays)
Non-Retail	$\geq 1$ million	Once per day (excluding weekends and holidays)
Non-Retail	$< 1$ million	Once per calendar week

(2) For balance systems, a weekly inspection to verify that the coaxial hoses are drained and the volume of gasoline per hose is recorded.

(3) A monthly verification of the dispensing flow rate of each nozzle and for each grade of gasoline to ensure compliance with the most recent applicable CARB Executive Order or Title 17 of the CCR requirements.

(4) An annual inspection to ensure compliance with all applicable District rules and regulations, and all permit conditions. The inspection shall verify that:

- (i) The District permit and the signs required by Subsection (d)(7) of this rule are current and posted;
- (ii) The facility complies with all permit conditions;
- (iii) The Phase II vapor recovery system is properly installed and complies with the most recent applicable CARB certification procedures;

(iv) All connections and fittings inside the dispenser are free of liquid leaks; and

(v) The lengths and installation arrangements of all dispenser hoses are in compliance with the most recent applicable CARB Executive Orders.

(5) Maintenance Procedures

(i) Except as provided in Subsection (e)(5)(ii) below, any component, device or system identified and recorded by the owner/operator as not being in good condition or not operating properly during the inspection specified above shall be repaired, replaced, or adjusted within seven calendar days of detection in a manner that will bring the facility into compliance with this rule and the most recent applicable CARB Executive Orders. Upon request and for good cause, the Air Pollution Control Officer may allow an additional seven calendar days for the repairs, replacements or adjustments specified above to be made.

(ii) Any component, device or system having a defect as defined in Title 17 of the CCR or identified in the most recent applicable CARB Executive Orders shall not be used.

(6) Any additional inspection and alternative maintenance procedures that may be required by the most recent applicable CARB Executive Orders and the Installation and Maintenance Manuals for the Phase II vapor recovery system as approved by CARB.

(f) **SOURCE TESTING**

(1) Within 60 calendar days of the installation date of a new or modified gasoline transfer and dispensing facility, an initial compliance source test shall be conducted as required by the applicable District Authority to Construct and the most recent applicable CARB Executive Orders.

(2) Periodic compliance source tests shall be conducted at least once every 12 months, or more frequently as determined necessary by the Air Pollution Control Officer to assure compliance with this rule. The source tests shall be conducted in accordance with the most recent applicable CARB Executive Orders and CARB Certification Procedures.

(3) Any person conducting the tests specified in Subsection (f)(1) and (f)(2) above shall have completed the South Coast Air Quality Management District's orientation class for testing and any subsequently required refresher classes or alternative training approved by the Air Pollution Control Officer. Such person shall have available to the District, at the time of the test, the following:

(i) A copy of a current certificate from the South Coast Air Quality Management District or from other approved training; and

(ii) Records of calibrations performed as required by the applicable test procedures.

(g) **RECORDKEEPING**

An owner/operator of any gasoline transfer and dispensing facility shall maintain at a minimum the following information as applicable:

(1) Records of inspections performed as required by Section (e) of this rule.

(2) Records of all malfunctioning components, including the date such components were identified or repaired during the inspection and maintenance.

(3) Repair logs which include at a minimum:

(i) Date of repair;

(ii) The name of the person(s) who performed the repair, and if applicable, the name, address and phone number of the person's employer;

(iii) Description of repair and maintenance performed;

(iv) Identification of each component that was repaired, maintained, or removed;

(v) Identification of each component that was installed as replacement, if applicable; and

(vi) Receipts for parts used in the repair and, if applicable, work orders, which include the name and signature of the person responsible for performing the repairs.

(4) Records of initial and periodic compliance source tests, which include at a minimum:

(i) Date and time of each test;

(ii) Name, affiliation, address and phone number of the person(s) who performed the test;

(iii) For a retest following a failed initial compliance or periodic compliance source test, description of repairs performed; and

(iv) Copies of all test reports, including test equipment calibration date(s), test results and failed test data, in District-approved format, and for a test that fails, a description of the reasons for the test failure.

(5) Monthly gasoline throughput records.

Except as provided below, all information specified in Subsections (g)(1) through (g)(5) shall be maintained on site for a period of at least three years. The most recent applicable CARB Executive Orders, and the Installation and Maintenance Manuals for the Phase II vapor recovery system as approved by CARB, shall be maintained on site at all times. All information shall be made available to the District upon request. Records for gasoline transfer and dispensing facilities that are unmanned may be kept at an alternative location approved in writing by the Air Pollution Control Officer. Receipts for parts and work orders for repairs as specified in Subsection (g)(3)(vi) above need not be maintained on site. Such receipts and work orders shall be provided within 14 calendar days of the District's request.

**(h) TEST METHODS**

(1) The mass emission factor and/or gasoline vapor control efficiency shall be determined in accordance with TP-201.2 – Efficiency and Emission Factor for Phase II Systems and TP-201.2A – Determination of Vehicle Matrix for Phase II Systems, and shall be determined by including all refueling emissions, stationary underground storage tank vent emissions and pressure-related fugitive emissions. Pressure-related fugitive emissions shall be determined in accordance with TP-201.2F – Pressure-Related Fugitive Emissions or the most recent applicable test method approved by CARB.

(2) Component leak rates, pursuant to Subsection (d)(5) of this rule, shall be determined in accordance with the most recent applicable test methods, test procedures, and certification procedures approved by CARB.

(3) The liquid removal rate of a liquid removal system, when installed per the most recent applicable CARB Executive Order, shall be determined in accordance with the CARB Test Method TP-201.6C (Option 2) – Compliance Determination of Liquid Removal Rate or the most recent applicable test method approved by CARB.

(4) The Reid Vapor Pressure shall be determined in accordance with the American Society for Testing and Materials (ASTM) Standard Test Method D323-99a or its most current version.

**(i) COMPLIANCE SCHEDULE**

(1) Any existing gasoline transfer and dispensing facility shall comply with the requirements of this rule after *(date of adoption)* except as follows:

(i) By six months from the date of adoption comply with all applicable requirements of the Inspection and Maintenance Program and Recordkeeping specified in Sections (e) and (g) of this rule.

(ii) By April 1, 2005, comply with the requirements of Subsection (d)(8) of this rule for compatibility with ORVR.

(iii) By January 1, 2008, submit to the Air Pollution Control Officer an application for Authority to Construct and Permit to Operate a CARB certified Phase II vapor recovery system meeting the requirements of Subsection (d)(2) of this rule.

(iv) By October 1, 2008, be in compliance with the requirements of Subsection (d)(2) of this rule.

(v) By October 1, 2008, facilities that dispense more than 1.8 million gallons of gasoline per year shall be in compliance with the requirements of Subsection (d)(9) of this rule.

(vi) By April 1, 2009, facilities that dispense between 600,000 gallons and 1.8 million gallons of gasoline per year shall be in compliance with the requirements of Subsection (d)(9) of this rule.

(2) Compliance dates specified in Subsections (i)(1)(ii) through (i)(1)(vi) above may be revised by the Air Pollution Control Officer to coincide with applicable later dates specified by the California Air Resources Board.

(3) Any new gasoline transfer and dispensing facility, including major modifications shall comply with all provisions of this rule, except for Subsections (d)(2) and (d)(9) of this rule, upon initial startup. Dates for compliance with the requirements of Subsections (d)(2) and (d)(9) will be established by the Air Pollution Control Officer to coincide with the applicable dates specified by the California Air Resources Board.