



#### Air Pollution Control Board

Greg Cox	District 1
Dianne Jacob	District 2
Pam Slater-Price	District 3
Ron Roberts	District 4
Bill Horn	District 5

**DATE:** March 1, 2006

**TO:** San Diego County Air Pollution Control Board

**SUBJECT:** 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 (District: All)

#### SUMMARY:

##### Overview

Adoption by the Air Pollution Control Board is requested for proposed new Rules 61.3.1 and 61.4.1 to incorporate the requirements of the State Air Resources Board's (ARB) Enhanced Vapor Recovery Program for gasoline transfer and dispensing operations. Gasoline vapors are ozone precursors and contain benzene which is a toxic air contaminant. Rules 61.3.1 and 61.4.1 will supersede existing Rules 61.3 and 61.4 for the majority of gasoline facilities. Current Air Pollution Control District (District) Rule 61.3 (Transfer of Volatile Organic Compounds into Stationary Storage Tanks) and Rule 61.4 (Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks) have specified vapor recovery requirements, primarily for gasoline facilities, for many years. These rules have become outdated for facilities affected by the State's new Enhanced Vapor Recovery requirements.

New Rule 61.3.1 will further control volatile organic compound emissions during gasoline transfers into underground storage tanks (Phase I Vapor Recovery). It requires facilities to install and maintain Phase I vapor controls certified by the ARB to meet Enhanced Vapor Recovery requirements. Virtually all facilities have already completed this upgrade. Rule 61.4.1 will further control emissions during gasoline dispensing into vehicle fuel tanks (Phase II Vapor Recovery). It will require most existing gasoline facilities to replace their Phase II vapor recovery equipment with a new certified system by January 2009.

In addition, both rules require each facility to follow an Inspection and Maintenance program to help ensure proper operation of vapor recovery systems and ongoing compliance. The rules also require contractors who install, modify, or repair vapor recovery systems to successfully complete manufacturer or ARB training and be responsible for compliance with specified rule provisions.

There are 889 retail and non-retail gasoline facilities in San Diego County with a total

10124 Old Grove Road, San Diego, California 92131-1649 • (858) 586-2600  
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annual gasoline throughput of approximately 1.33 billion gallons. The volatile organic compound emissions from these sources with existing vapor recovery systems are about 837 tons per year. New Rules 61.3.1 and 61.4.1 are expected to further reduce volatile organic compound emissions in San Diego County by approximately 447 tons per year, or 53.4%.

New Rules 61.3.1 and 61.4.1 are not proposed for inclusion in the State Implementation Plan for San Diego County because they impose State emission standards that go beyond federal requirements.

**Recommendation(s)**

**AIR POLLUTION CONTROL OFFICER**

1. Adopt the resolution adopting new Rules 61.3.1 and 61.4.1 and make appropriate findings:
  - (i) of necessity, authority, clarity, consistency, non-duplication and reference as required by Section 40727 of the State Health and Safety Code;
  - (ii) that an analysis comparing Rules 61.3.1 and 61.4.1 with existing requirements applicable to the sources affected by the proposed rules has been prepared pursuant to Health and Safety Code Section 40727.2;
  - (iii) that adopting Rules 61.3.1 and 61.4.1 will alleviate a problem and will not interfere with the attainment of ambient air quality standards (Section 40001 of the State Health and Safety Code); and
  - (iv) that the Air Pollution Control Board has actively considered the socioeconomic impact of adopting new Rules 61.3.1 and 61.4.1 pursuant to Section 40728.5 of the State Health and Safety Code and has made a good faith effort to minimize adverse socioeconomic impacts;
  - (v) that it is certain there is no possibility that adopting new Rules 61.3.1 and 61.4.1 may have a significant adverse effect on the environment, and this action is exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations, Title 14, Section 15061(b)(3).
2. Direct the Air Pollution Control Officer to report to the Air Pollution Control Board no later than April 2008 on the cost-effectiveness of requiring Phase II Enhanced Vapor Recovery at low-volume gasoline dispensing facilities and make a recommendation about the appropriateness of providing an exemption from these Phase II requirements to low-volume gasoline dispensing facilities.

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**Fiscal Impact**

The recommended action will have no new or additional fiscal impact on the Air Pollution Control District. Existing Air Pollution Control District resources will be used to evaluate, permit, and inspect facilities upgrading their vapor recovery systems.

**Business Impact Statement**

Rules 61.3.1 and 61.4.1 implement the State-mandated Enhanced Vapor Recovery program. The rules also include an Inspection and Maintenance program for facility operators to ensure that vapor recovery systems are properly operated and maintained. This requirement is already being implemented through District permit conditions and its inclusion in the rules will not adversely impact local businesses. Both rules also require any contractor engaged in the installation, repair, and maintenance of a vapor recovery system to complete all relevant training programs. Contractors/installers must comply with specified rule requirements. These provisions will assist owners and operators of gasoline dispensing facilities by holding contractors directly responsible if they improperly install or repair vapor recovery systems.

**Advisory Board Statement**

Consideration of new proposed Rules 61.3.1 and 61.4.1 by the Air Pollution Control District Advisory Committee was scheduled for its November 16, 2005, meeting. No Advisory Committee members attended. No comments or concerns with the proposed rules have been expressed by Advisory Committee members.

**BACKGROUND:**

Gasoline transfer, storage, and dispensing operations are a significant source of emissions of volatile organic compounds (VOC) which react in the atmosphere with nitrogen oxides to form ozone, the major component of photochemical smog. Gasoline storage and dispensing operations also emit toxic air contaminants. Despite significant improvements in air quality in the last fifteen years, San Diego County does not yet meet the State or Federal Ambient Air Quality Standards for ozone. Currently, VOC emissions from gasoline storage, transfer, and dispensing operations are regulated through the statewide vapor recovery program, adopted by the Air Resources Board (ARB), and reflected in local Air Pollution Control District (District) Rules 61.3 and 61.4. The program applies to gasoline transfer from mobile transport tanks into stationary storage tanks at gasoline dispensing facilities (Phase I vapor recovery) and to gasoline dispensing during refueling of vehicles (Phase II vapor recovery). It requires all vapor recovery systems to comply with specified performance standards and be certified by ARB.

The gasoline vapor recovery program is implemented through ARB Executive Orders and Certification Procedures and the corresponding rules and permits of local air districts. Gasoline transfer, storage, and dispensing operations in San Diego County are currently regulated by Rule 61.3 (Transfer of Volatile Organic Compounds into Stationary Storage Tanks) and Rule 61.4 (Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks). Both rules were initially adopted in 1977 and last amended in 1990. Under the current vapor recovery program, VOC

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emissions from gasoline dispensing facilities in San Diego County have been reduced by approximately 92%, or about 10,300 tons per year.

In 2001, ARB promulgated Enhanced Vapor Recovery (EVR) regulations to improve the emission control effectiveness of the program. EVR regulations were subsequently amended several times and became effective in December 2003 with final implementation dates in 2009 and 2010. As a result, existing District Rules 61.3 and 61.4 have become outdated for facilities subject to the State EVR program.

Proposed new Rules 61.3.1 and 61.4.1 implement the State EVR program and fulfill the District's obligations under State law and the Regional Air Quality Strategy to adopt all feasible emission control measures. Both rules require gasoline emissions to be controlled with ARB-certified Enhanced Vapor Recovery systems. The systems must be installed, operated, and maintained in accordance with the most recent ARB Certification Procedures and Executive Orders. All vapor recovery systems must be free of defects as specified in State law and ARB Executive Orders. Defective components must be taken out of service immediately upon discovery until repaired or replaced. Components with minor defects must be repaired, adjusted, or replaced within seven calendar days. Facilities with an annual gasoline throughput of 600,000 gallons or more are also required by the State to install a certified In-Station Diagnostics (ISD) system which will detect some system problems and alert the facility operator so repairs can be promptly made.

New facilities or facilities undergoing major modification will have to comply with all applicable rule requirements at the time of installation and start-up. The Phase I EVR system upgrades required by Rule 61.3.1 are already in effect for existing facilities (the final compliance date in State law was April 1, 2005). The State-required Phase II EVR system upgrades at existing facilities, excluding the ISD installation, must be completed by January 2009. The final date for compliance with all Rule 61.4.1 requirements (including ISD) is April 2010. The rule authorizes the Air Pollution Control Officer to extend these compliance dates should ARB extend the dates under the State program.

In addition to the EVR requirements mandated by State law, both rules include an Inspection and Maintenance program with specified inspection frequencies at each facility, effective August 2006. Facilities are required to maintain accurate records of all inspections, maintenance, and repair operations as well as records of periodic compliance tests. Both rules will also extend responsibility for proper installation, modification, and repair of vapor recovery systems to contractors/installers of such systems. The rules also require contractors, installers, and testers of vapor recovery equipment to successfully complete relevant South Coast Air Quality Management District (or approved alternative), ARB and system manufacturer training programs.

The State EVR program applies to virtually all gasoline dispensing facilities, both retail and non-retail, regardless of their size. Low-volume gasoline facilities (with an annual gasoline

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throughput less than 600,000 gallons) are exempted by ARB only from the requirement to install ISD systems. The District has estimated the cost-effectiveness of the EVR program for retail and non-retail gasoline service stations in the county and has concluded that some parts of the program (in particular Phase II EVR upgrades) may not be cost-effective for low-volume facilities. However, the State Air Resources Board staff contends that State law requires the District to implement and enforce vapor recovery regulations as promulgated by ARB, effectively disallowing any exemptions based on economic feasibility or cost-effectiveness for low-volume facilities. The District has discussed this issue at length with ARB legal and technical staff. As a result, ARB has agreed to work with the District over the next 18 months to cooperatively address Phase II EVR cost-effectiveness for low-volume facilities. ARB also agreed to propose revisions to its regulations by September 2007 if it is determined that Phase II EVR requirements are not cost-effective for low-volume facilities. The District will report to the Air Pollution Control Board no later than April 2008 on the outcome of this cost-effectiveness study and make a recommendation on the appropriateness of providing an exemption in Rule 61.4.1 for low-volume facilities.

Of the 889 facilities in San Diego County affected by the new rules, 704 are retail gasoline stations with a total annual gasoline throughput of approximately 1.25 billion gallons (94.1% of the county total) and 185 are non-retail stations with a total annual gasoline throughput of 73 million gallons (5.9%). VOC emissions from these sources, all of them subject to existing Phase I and Phase II vapor recovery regulations, are about 837 tons per year. Implementation of new Rule 61.3.1 will result in approximately 168 tons per year of additional VOC emission reductions. Rule 61.4.1, when fully implemented, is expected to achieve an additional reduction of about 279 tons of VOC emissions per year. Overall, both rules would reduce emissions from gasoline storage and dispensing operations by 447 tons per year (53.4%).

The District does not propose to include Rules 61.3.1 and 61.4.1 in the State Implementation Plan for San Diego County because they implement more stringent State-mandated emission standards that go beyond federal requirements. In addition, existing rules also control emissions from storage and dispensing of VOC from aboveground storage tanks and emissions from storage and distribution of organic compounds other than gasoline, such as alcohols, ketones, and organic acids. These operations are not regulated by the new proposed rules. Therefore, current Rules 61.3 and 61.4 will be retained as part of the federal State Implementation Plan.

A public workshop for proposed new Rules 61.3.1 and 61.4.1 was held on September 13, 2004, and was attended by 29 people. The comments and District responses are presented in the attached workshop report (Attachment B).

#### **Socioeconomic Impact Assessment**

Section 40728.5 of the State Health and Safety Code requires the District to perform an assessment of the socioeconomic impacts of new and revised rules that will significantly affect air quality or emissions limitations.

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Proposed new Rules 61.3.1 and 61.4.1 will codify the implementation requirements of the statewide EVR program in the District Rules and Regulations. During the original promulgation of the EVR program, subsequent 2002 Technology Review and several subsequent amendments, ARB considered the potential economic impacts on businesses and individuals as required by the California Administrative Procedure Act and the Government Code. The overall cost-effectiveness of the program was estimated by ARB as \$5.24 per pound of VOC reduced. ARB concluded that the EVR program will not "impose an unreasonable cost burden on gasoline dispensing equipment manufacturers, component suppliers, or gasoline dispensing facilities." ARB also stated that affected facilities are "most likely to pass on the bulk of the cost increase to gasoline consumers."

Rules 61.3.1 and 61.4.1 reflect the statewide EVR program already mandated by State law. The rules do not contain any other requirements which would significantly affect air quality or emission limitations, or the overall cost-effectiveness of the State program. The additional Inspection and Maintenance program included in the rules will not result in an economic hardship for affected facilities because it is already being implemented through the District permitting process. This self-inspection program actually assists a gas station owner or operator to identify the defects in a vapor recovery system before they are found by the District compliance inspectors, thus allow avoiding possible penalty costs. This is especially important for small businesses.

State laws do not specifically require ARB to assess the cost impact of any new or amended regulation on small businesses. However, the District is required by Health and Safety Code Section 40728.5 (b)(3) to estimate the range of probable costs for small businesses. In addition, the Board directed the District to provide a Business Impact Statement for any new or amended rule. The District has evaluated the economic impact of the proposed rules on low-volume facilities (annual gasoline throughput less than 600,000 gallons). The results of the evaluation are provided in the Attachment C.

The District has concluded that Phase II EVR upgrades may not be cost-effective for low-volume facilities. By necessity, these estimates are preliminary because only one Phase II EVR system has been certified by ARB. It is expected that the cost of retrofits may decline when more Phase II EVR systems are certified by ARB. However, the State Air Resources Board staff contends that State law requires the District to implement and enforce vapor recovery regulations as promulgated by ARB, effectively disallowing any exemptions based on economic feasibility or cost-effectiveness for low-volume facilities. The District discussed this issue at length with ARB and ARB has agreed to revisit the Phase II EVR cost analysis for low-volume facilities within the next 18 months. The District expects that ARB will be able to reassess its cost analysis for low-volume facilities by September 2007. Once ARB has completed its re-evaluation and determined whether changes to Phase II EVR requirements are appropriate, the District will report to the Board with a recommendation concerning the appropriateness of including a Phase II EVR exemption in Rule 61.4.1.

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### **Compliance with Board Policy on Adopting New Rules**

On February 2, 1993 (APCB #2), the Board directed that, with the exception of a regulation requested by business or a regulation for which a socioeconomic impact assessment is not required, no new or revised regulation shall be implemented unless specifically required by federal or State law. New Rules 61.3.1 and 61.4.1 are required by State law and therefore are consistent with this Board directive. The District found it necessary to include in both rules additional self-inspection and maintenance requirements (I&M program) that strengthen the rules and improve their enforceability. These I&M requirements are currently required through District permit conditions. The program will also provide businesses additional tools for complying with the rules.

### **Environmental Statement**

The California Environmental Quality Act requires an environmental review for certain actions. The District has conducted a preliminary review of whether the California Environmental Quality Act applies to the proposed Rules 61.3.1 and 61.4.1. It is certain there is no possibility that adopting new Rules 61.3.1 and 61.4.1 may have a significant adverse effect on the environment. Therefore, adoption of new Rules 61.3.1 and 61.4.1 is exempt from the provisions of the California Environmental Quality Act pursuant to California Code of Regulations, Title 14, Section 15061(b)(3).

### **Comparison to Existing Requirements**

Prior to adopting, amending, or repealing a rule or regulation, California Health and Safety Code Section 40727 requires findings of necessity, authority, clarity, consistency, non-duplication, and reference. As part of the consistency findings to ensure proposed rule requirements do not conflict with or contradict other District or federal regulations, Health and Safety Code Section 40727.2 requires the District to perform a written analysis identifying and comparing the air pollution control standards and other provisions of new Rules 61.3.1 and 61.4.1 with existing or proposed District rules and guidelines and existing federal rules, requirements, and guidelines applicable to the same source category. The requirements of new Rules 61.3.1 and 61.4.1 have been compared to federal requirements, to the District's New Source Review rules and to existing Rules 61.3 and 61.4. The analysis is attached (Attachment D). Rules 61.3.1 and 61.4.1 neither contradict nor duplicate any federal or District requirements.

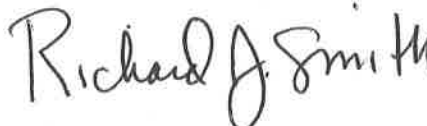
### **Linkage to the County of San Diego's Strategic Plan**

New Rules 61.3.1 and 61.4.1 align with the Environment Initiative of the County's Strategic Plan because both rules will result in sizeable additional air contaminant emission reductions and thus help to preserve air quality and to protect the public from the harmful effects of air pollution, achieve and maintain air quality standards, and meet federal and State mandates. New Rules

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61.3.1 and 61.4.1 appropriately balance preserving air quality, protecting public health, and meeting economic development needs.

Respectfully submitted,



RICHARD J. SMITH  
Air Pollution Control Officer

CHANDRA WALLAR  
Deputy Chief Administrative Officer

#### ATTACHMENTS

- A. Resolution adding new Rules 61.3.1 and 61.4.1 to Regulation IV of the Rules and Regulations of the San Diego County Air Pollution Control District
- B. Workshop Report
- C. Economic Evaluation
- D. Comparative Analysis



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**AGENDA ITEM INFORMATION SHEET**

**CONCURRENCE(S)**

<b>COUNTY COUNSEL REVIEW</b>	<input checked="" type="checkbox"/> Yes	<i>TD 2/15/06.</i>
Written disclosure per County Charter Section 1000.1 required	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>GROUP/AGENCY FINANCE DIRECTOR</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
<b>CHIEF FINANCIAL OFFICER</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
Requires Four Votes	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>GROUP/AGENCY INFORMATION TECHNOLOGY DIRECTOR</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
<b>CHIEF TECHNOLOGY OFFICER</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
<b>DEPARTMENT OF HUMAN RESOURCES</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
<b>Other Concurrence(s):</b>	N/A	

**ORIGINATING DEPARTMENT:** Air Pollution Control District, County of San Diego

**CONTACT PERSON(S):**

Richard J. Smith  
Name  
(858) 586-2700  
Phone  
(858) 586-2701  
Fax  
0176  
Mail Station  
Richard.Smith@sdcounty.ca.gov  
E-mail

AUTHORIZED REPRESENTATIVE:

*Richard J. Smith*  
Richard J. Smith, Air Pollution Control Officer

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**AGENDA ITEM INFORMATION SHEET**  
(continued)

**PREVIOUS RELEVANT BOARD ACTIONS:**

October 16, 1990 (APCB #3), Amended Rules 61.3 and 61.4.

**BOARD POLICIES APPLICABLE:**

N/A

**BOARD POLICY STATEMENTS:**

N/A

**CONTRACT AND/OR REQUISITION NUMBER(S):**

N/A

NEW ADDED RULES

Re Rules and Regulations of the )  
Air Pollution Control District )  
of San Diego County . . . . . )

**RESOLUTION ADDING NEW RULES 61.3.1 AND RULE 61.4.1 TO  
REGULATION IV OF THE RULES AND REGULATIONS OF THE  
SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT**

On motion of Member Roberts, seconded by Member Slater-Price, the following resolution is adopted:

**WHEREAS**, the San Diego County Air Pollution Control Board, pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

**WHEREAS**, said Board now desires to amend said Rules and Regulations; and

**WHEREAS**, notice has been given and a public hearing has been had relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code.

**NOW THEREFORE IT IS RESOLVED AND ORDERED** that the San Diego County Air Pollution Control Board finds that proposed new Rules 61.3.1 and Rule 61.4.1 will not have significant effect on the environment and that an Environmental Impact Report need not be prepared pursuant to the California Environment Quality Act; and:

**NOW THEREFORE IT IS RESOLVED AND ORDERED** by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be and hereby are amended as follows:

- 1. Proposed new Rule 61.3.1 is to read as follows:

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

(a) **APPLICABILITY**

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

(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 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 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 volume of gasoline dispensed during any calendar year at a gasoline 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) **“Contractor/Installer”** means a person engaged in the installation, modification, and/or repair of a new or existing vapor recovery system and/or its components at a gasoline dispensing facility. This definition does not include the owner or operator of the gasoline dispensing facility or an employee of such owner or operator.

(13) **“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 adaptor or coupler.

(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 CCR, Section 2250 et seq. and as further defined in Title 13 CCR Section 2250(b).

(15) **“Gasoline Dispensing Facility (GDF)”** means a stationary facility, consisting of one or more storage tanks and associated equipment, that receives, stores, and 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 gasoline spill from gasoline delivery or vapor return lines that has a volume greater than 30 milliliters during any single disconnect operation.

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

(22) **“Monthly Gasoline Throughput”** means the total volume of gasoline dispensed during any calendar month at a gasoline dispensing facility.

(23) **“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.

(24) **“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.

(25) **“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 facility.

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

(27) **“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.

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

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

(30) **“Riser Pipe”** means a pipe mounted to the top of a stationary underground storage tank.

(31) **“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.

(32) **“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.

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

(34) **“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.

(35) **“Title 17 Defect”** means a defect substantially impairing the effectiveness of vapor recovery systems as specified in Title 17 CCR or in the applicable CARB Executive Order.

(36) **“Vapor Leak”** means a gasoline vapor concentration equal to 10,000 parts per million by volume (ppmv) 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.

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

(38) **“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.

(39) **“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**

(1) A person shall not supply, offer for sale, sell, install or allow the installation of any Phase I vapor recovery system or any of its components, unless the system and components are CARB certified. All components shall be certified for use with the CARB-certified Phase I vapor recovery system installed and shall be 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 identification requirement by CARB.

(2) On and after *(six months from the date of the rule adoption)*, a contractor/installer shall not install, modify, or repair any Phase I vapor recovery system or component, unless they have successfully completed a manufacturer’s training program applicable to such system and a relevant training program specified by the Air Pollution Control Officer. A copy of current documents demonstrating that such programs have been successfully completed shall be made available to the Air Pollution Control Officer upon request.

(3) A person shall not operate any gasoline dispensing facility unless all applicable portions of the following requirements are met:

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

(ii) Each stationary underground storage tank is equipped with a CARB-certified Phase I vapor recovery system that has a minimum gasoline vapor 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.

(iii) The Phase I vapor recovery system and associated components are installed, maintained, and operated free of Title 17 defects and in accordance with the most recent applicable CARB certification procedures, CARB Executive Orders, and the manufacturer’s Installation, Operation, and Maintenance manual.

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

(A) 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

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

(C) 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

(D) 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.

(v) 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.

(vi) 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 dispensing facility and to any person conducting the gasoline transfer.

(vii) 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). This requirement shall apply to the owner/operator of the gasoline dispensing facility and to any person conducting the gasoline transfer.

**(e) INSPECTION AND MAINTENANCE PROGRAM**

On and after September 1, 2006, an owner/operator of any gasoline 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 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 popped 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**

<b>Type of Gasoline Dispensing Facility</b>	<b>Frequency of Inspection</b>
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 Air Pollution Control District (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 and CARB Executive Orders;
- (iv) All stationary underground storage tanks have gasoline submerged drop-tubes installed and not damaged; and
- (v) The vent pipes are equipped with the required pressure/vacuum valves and each such valve is properly installed.

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 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 Title 17 defect shall not be used or made available for use.

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

**(f) SOURCE TESTING**

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

(2) Periodic compliance source tests shall be conducted at least once every calendar year and in accordance with the schedule specified by the Air Pollution Control Officer. More frequent tests may be required as determined necessary by the Air Pollution Control Officer to ensure compliance with this rule.

(3) Any person conducting the tests specified in Subsections (f)(1) or (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, and any training or certifications required by CARB or a system's manufacturer. Such person shall make available to the District, at the time of the test and any other time upon request, the following:

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

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

(4) Any person conducting the tests specified in Subsection (f)(1) or (f)(2) above shall conduct such tests in accordance with the procedures specified in the Authority to Construct, Permit to Operate, and the most recent applicable CARB Executive Orders and Certification Procedures.

(5) Any person conducting the tests specified in Subsection (f)(1) or (f)(2) shall, within 15 calendar days of the completion of such test, and within 15 calendar days of the completion of a retest in the event of a failed or invalid test, provide the owner or operator of the gasoline dispensing facility a complete and accurate test report containing all the information specified in Subsection (g)(3) of this rule.

**(g) RECORDKEEPING**

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

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

(2) Records of all malfunctioning components, including the date(s) such components were identified and repaired or replaced, and any other records and information required by the most recent applicable CARB Executive Orders.

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

(i) Date and time of each test; and

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

(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.

(4) Monthly gasoline throughput records.

Except as provided below, all information specified in Subsections (g)(1) through (g)(4) 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 approved by CARB, shall be maintained on site at all times. All such information shall be made available to the District upon request. Records for gasoline dispensing facilities that are not staffed may be kept at an alternative location approved in writing by the Air Pollution Control Officer.

**(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 CARB Test Method 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)(3)(v) of this rule, shall be determined in accordance with the most recent applicable test methods, test procedures, and certification procedures approved by CARB.

(5) 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) **(RESERVED)**

2. Proposed new Rule 61.4.1 is 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**

Except as otherwise provided in Section (b), this rule is applicable at the following gasoline dispensing facilities where gasoline is transferred from stationary underground storage tanks into any motor vehicle fuel tank with a capacity greater than 5 gallons (18.9 liters):

(1) Any retail gasoline 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 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 fuel tanks in any calendar month on the parcel of land where the gasoline dispensing facility is located. This parcel of land includes any adjoining parcels of land under common ownership or entitlement to use.

**(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 dispensing facility located on a parcel of land where not more than 2,000 gallons (7,570 liters) are transferred into motor vehicle fuel tanks during any calendar month. This parcel of land includes any adjoining parcels of land under common ownership or entitlement to use. 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 Air Pollution Control Officer 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 volume of gasoline dispensed during any calendar year at a gasoline 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) **“Contractor/Installer”** means a person engaged in the installation, modification, and/or repair of a new or existing vapor recovery system and/or its components at a gasoline dispensing facility. This definition does not include the owner or operator of the gasoline dispensing facility or an employee of such owner or operator.

- (13) **“EVR”** means Enhanced Vapor Recovery.
- (14) **“Existing Phase II Gasoline Dispensing Facility”** means a facility in San Diego County whose construction was completed before April 1, 2005, and which is subject to the requirements of this rule.
- (15) **“Faceplate”** means a soft donut-shaped assembly attached to the end of a vapor recovery nozzle so that a tight seal with a motor vehicle fill pipe can be achieved while gasoline is being dispensed.
- (16) **“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 CCR, Section 2250 et seq. and as further defined in Title 12 CCR Section 2250(b).
- (17) **“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.
- (18) **“Gasoline Dispensing Facility (GDF)”** means a stationary facility, consisting of one or more storage tanks and associated equipment, that receives, stores, and dispenses gasoline.
- (19) **“Gasoline Vapor Control Efficiency (Volumetric Efficiency)”** means a control efficiency of the Phase II 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.
- (20) **“Gasoline Vapors”** means organic compounds in vapor form displaced during gasoline transfer and dispensing operations, including any entrained liquid gasoline.
- (21) **“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.
- (22) **“In-Station Diagnostics (ISD)”** means equipment that provides monitoring of vapor recovery system parameters and components, and alerts the station operator when certain failure modes are detected so that corrective action can be taken.
- (23) **“Intermediate Refueler”** means a mobile transport tank used primarily in the fueling of vehicle, boat, or aircraft fuel tanks.
- (24) **“Leak Detection Solution”** means any solution containing soap, detergent, or similar materials that promote formation of bubbles at the site of any escaping vapors.
- (25) **“Liquid Leak”** means any visible liquid leak of gasoline at a rate in excess of three drops per minute.

(26) **“Major Modification”** means a modification of a Phase II vapor recovery system that includes the addition, replacement, or removal of 50% 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 On-Board Refueling Vapor Recovery (ORVR) compatible do not constitute a major modification.

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

(28) **“Monthly Gasoline Throughput”** means the total volume of gasoline dispensed during any calendar month at a gasoline dispensing facility.

(29) **“New Phase II Gasoline Dispensing Facility”** means a facility in San Diego County whose construction or major modification was completed on or after April 1, 2005, and which is subject to the requirements of this rule.

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

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

(32) **“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 facility.

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

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

(35) **“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.

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

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

(38) **“Title 17 Defect”** means a defect substantially impairing the effectiveness of vapor recovery systems as specified in Title 17 CCR or in the applicable CARB Executive Order.

(39) **“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.

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

(41) **“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.

(42) **“Vapor Leak”** means a gasoline vapor concentration equal to 10,000 parts per million by volume (ppmv) 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.

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

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

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

**(d) EQUIPMENT AND OPERATION REQUIREMENTS**

(1) A person shall not supply, offer for sale, sell, install or allow the installation of any Phase II vapor recovery system or any of its components, unless the system and components are CARB certified. All components shall be certified for use with the CARB certified Phase II vapor recovery system installed and shall be 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 identification requirement by CARB.

(2) On and after (six months from the date of the rule adoption), a contractor/installer shall not install, modify, or repair any Phase II vapor recovery system or component, unless they have successfully completed a manufacturer’s training program applicable to such system and a relevant training program specified by the Air Pollution Control Officer. A copy of current documents demonstrating that such programs have been successfully completed shall be made available to the Air Pollution Control Officer upon request.

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

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



(ii) By the applicable dates specified in Subsections (j)(1)(iii) and (j)(3) of this rule, the Phase II vapor recovery system has:

(A) 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

(B) 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.

(iii) The Phase II vapor recovery system and associated components are installed, maintained, and operated in accordance with the most recent applicable CARB certification procedures, CARB Executive Orders, and the manufacturer's Installation, Operation and Maintenance manual.

(iv) The Phase II vapor recovery system and associated components are maintained free of Title 17 defects.

(v) 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.

(vi) All liquid removal devices, when required to be installed pursuant to the most recent applicable CARB Executive Order, achieve a minimum liquid removal rate of at least 5 milliliters per gallon of gasoline dispensed unless a different minimum liquid removal rate is specified in the most recent applicable CARB Executive Order.

(vii) The facility has conspicuously posted:

(A) The nozzle operating instructions and a toll-free phone number specified by the Air Pollution Control Officer for the public to call to report problems with a nozzle or a vapor recovery system; and

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

(viii) The Phase II vapor recovery system is CARB certified to be compatible with Onboard Refueling Vapor Recovery (ORVR).

(ix) By the applicable dates specified in Subsections (j)(1)(iv), (j)(1)(v) and (j)(3) of this rule, if a facility dispenses more than 600,000 gallons of gasoline in any calendar year, the facility must be equipped with a CARB Certified In-Station Diagnostic (ISD) system. This gasoline dispensing threshold may be revised after public notice and a 30-day comment period by the Air Pollution Control Officer to conform with an alternative threshold specified by CARB.

(x) 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 dispensing facility unless the facility replaces more than 50% of the dispensers. Existing dispensers that do not meet this requirement and 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**

On and after September 1, 2006, an owner/operator of any gasoline 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 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 boots (if required) are free of holes, slits, and rips that are Title 17 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 Title 17 defects.

**Table 1**

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

(2) For balance systems, draining weekly any retained gasoline from the coaxial hoses and recording the volume of gasoline removed from each hose.

(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 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)(3)(vii) 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 and CARB Executive Orders;

(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 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 Title 17 defect shall not be used or made available for use.

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

**(f) SOURCE TESTING**

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

(2) Periodic compliance source tests shall be conducted at least once every calendar year and in accordance with the schedule specified by the Air Pollution Control Officer. More frequent tests may be required as determined necessary by the Air Pollution Control Officer to assure compliance with this rule.

(3) Any person conducting the tests specified in Subsection (f)(1) or (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 and any training or certifications required by CARB or

system manufacturer. Such person shall make available to the District, at the time of the test and any other time upon request, the following:

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

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

(4) Any person conducting the tests specified in Subsection (f)(1) or (f)(2) shall conduct such tests in accordance with the procedures specified in the Authority to Construct, Permit to Operate and the most recent applicable CARB Executive Orders and Certification Procedures.

(5) Any person conducting the tests specified in Subsection (f)(1) or (f)(2) shall, within 15 calendar days of the completion of such test, and within 15 calendar days of the completion of a retest in the event of a failed or invalid test, provide the owner or operator of the gasoline dispensing facility a complete and accurate test report containing all the information specified in Subsection (g)(3) of this rule.

**(g) RECORDKEEPING**

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

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

(2) Records of all malfunctioning components, including the date(s) such components were identified and repaired or replaced, and any other records and information required by the most recent applicable CARB Executive Orders.

(3) 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.

(4) Monthly gasoline throughput records.

Except as provided below, all information specified in Subsections (g)(1) through (g)(4) 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 as approved by CARB, shall be maintained on site at all times. All such information shall be made available to the District upon request. Records for gasoline dispensing facilities that are not staffed may be kept at an alternative location approved in writing by the Air Pollution Control Officer.

**(h) TEST METHODS**

(1) The mass emission factor and/or gasoline vapor control efficiency shall be determined in accordance with CARB Test Method TP-201.2 – Efficiency and Emission Factor for Phase II Systems and CARB Test Method 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 CARB Test Method 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)(3)(v) 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 required to be installed pursuant to 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) 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) (RESERVED)**

**(j) COMPLIANCE SCHEDULE**

(1) Any existing gasoline dispensing facility shall comply with the requirements of this rule after March 1, 2006 except as follows:

(i) By September 1, 2006, comply with all applicable requirements in Sections (e) and (g) of this rule for Inspection and Maintenance Program and Recordkeeping specified.

(ii) By April 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)(3)(ii) of this rule.

(iii) By January 1, 2009, be in compliance with the gasoline vapor control efficiency requirements of Subsection (d)(3)(ii) of this rule.

(iv) By April 1, 2009, facilities that dispense more than 1.8 million gallons of gasoline per year shall be in compliance with the ISD requirements of Subsection (d)(3)(ix) of this rule.

(v) By April 1, 2010, facilities that dispense between 600,000 gallons and 1.8 million gallons of gasoline per year shall be in compliance with the ISD requirements of Subsection (d)(3)(ix) of this rule.

(2) Compliance dates specified in Subsections (j)(1)(ii) through (j)(1)(v) 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 dispensing facility, including those undergoing major modifications shall comply with all provisions of this rule, except for Subsection (d)(3)(ix), upon initial startup. Dates for compliance with the requirements of Subsection (d)(3)(ix) will be established by the Air Pollution Control Officer to coincide with the applicable dates specified by the California Air Resources Board.

**IT IS FURTHER RESOLVED AND ORDERED** that the subject additions of Rule 61.3.1 and Rule 61.4.1 to Regulation IV shall take effect upon adoption.

**PASSED AND ADOPTED** by the Air Pollution Control Board of the San Diego County Air Pollution Control District, State of California, this 1st day of March, 2006, by the following votes:

**AYES: Cox, Jacob, Slater-Price, Roberts, Horn**

STATE OF CALIFORNIA)  
County of San Diego)§

I hereby certify that the foregoing is a full, true and correct copy of the Original entered in the Minutes of the Board of Supervisors.

THOMAS J. PASTUSZKA  
Clerk of the Air Pollution Control Board

By Kellie C. Kellogg  
Kellie C. Kellogg, Deputy

Resolution No. 06-027  
03/01/2006 (APCB 1)



APPROVED AS TO FORM AND LEGALITY  
COUNTY COUNSEL

BY Dutton  
SENIOR DEPUTY

Resolution / Rule 61.3.1 and Rule 61.4.1

A-20

**AIR POLLUTION CONTROL DISTRICT  
SAN DIEGO COUNTY**

**WORKSHOP REPORT**

**PROPOSED NEW RULE 61.3.1 - TRANSFER OF GASOLINE INTO  
STATIONARY UNDERGROUND STORAGE TANKS**

**AND**

**PROPOSED NEW RULE 61.4.1 – TRANSFER OF GASOLINE FROM  
STATIONARY UNDERGROUND STORAGE TANKS INTO VEHICLE FUEL TANKS**

A workshop notice was mailed to all companies and government agencies in San Diego County that may be subject to proposed new Rule 61.3.1 – Transfer of Gasoline into Stationary Underground Storage Tanks and Rule 61.4.1 – Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicle Fuel Tanks. Notices were also mailed to all Economic Development Corporations and Chambers of Commerce in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and other interested parties.

The workshop was held on September 13, 2004, and was attended by 29 people. Written comments were also received. The comments and Air Pollution Control District (District) responses are provided below:

**PROPOSED NEW RULE 61.3.1**

**1. WRITTEN COMMENT:**

The definition of delivery elbow in Section (c) should be revised to specify that a hose from a cargo tank should be connected to a storage tank pipe riser adaptor or coupler.

**DISTRICT RESPONSE:**

The District agrees and has revised the definition in Section (c) as suggested.

**2. WRITTEN COMMENT:**

The term Gasoline Transfer and Dispensing Facility (GDF) seems to be more technical than is really needed. Although gasoline is indeed transferred into the underground storage tanks at a GDF, service stations in vapor recovery regulations are typically called “gasoline dispensing facilities.”

**DISTRICT RESPONSE:**

The District agrees. The term has been changed to “Gasoline Dispensing Facility (GDF)” as suggested. The definition in proposed new Rule 61.4.1 has also been revised.

**3. WORKSHOP COMMENT:**

Section (c) includes two definitions for a liquid leak for cargo tanks. The difference between the two definitions is not clear.

**DISTRICT RESPONSE:**

The District agrees. The definition of a liquid leak for cargo tanks in Section (c) has been revised to include only one definition for a liquid leak applicable during a gasoline delivery by cargo tanks. This definition (a gasoline spill with a volume greater than 30 milliliters per single disconnect) is used by the District in determining whether there is a leak during a gasoline delivery.

**4. WRITTEN COMMENT:**

Part of the definition for a liquid leak for cargo tanks in Section (c) seems to refer to loading arms at top-loading bulk gasoline terminals. The requirement is not pertinent to this rule and should be deleted. In addition, there are no top-loaded gasoline tank trucks in the District.

**DISTRICT RESPONSE:**

The District has revised the definition in Section (c) to clarify the requirement and to delete the reference to top-loading operations.

**5. WRITTEN COMMENT:**

The definition of submerged drop-tube in Section (c) should be revised taking into consideration that a tank loaded through a side opening is technically not being filled by a drop-tube.

**DISTRICT RESPONSE:**

The District agrees. Rule 61.3.1 applies only to stationary underground storage tanks and since these tanks are not loaded from the side, the language relating to side loading has been removed.

**6. WRITTEN COMMENT:**

The definition of a vapor leak should specify that a gasoline vapor concentration is measured in parts per million by volume (ppmv).

**DISTRICT RESPONSE:**

The District agrees and has revised the definition in Section (c) as suggested. The definition of a vapor leak in proposed Rule 61.4.1 has also been revised.

**7. WRITTEN COMMENT:**

Where is the term "vapor leak" used in the rule?

**DISTRICT RESPONSE:**

The term vapor leak is used in the definition of the term "Vapor Tight" in Section (c). "Vapor Tight" is defined as an absence of a vapor leak.

**8. WRITTEN COMMENT:**

In Section (c), a vent pipe is defined as "... any pipe which is designed to convey an air/gasoline vapor mixture from the vapor recovery system to the atmosphere." This definition reflects the notion that vapors collected by the vapor recovery system are discharged uncontrolled to the atmosphere. The District should replace that definition with the following: "Vent Pipe means any pipe connected



to the vapor space of a stationary underground storage tank designed to allow relief of excess pressure.”

**DISTRICT RESPONSE:**

There are some currently certified Phase I vapor recovery systems where the vent pipe does in fact convey the vapor mixture from the vapor recovery system to the atmosphere. In addition, this wording assures that a vent pipe designed to relieve excess pressure would not circumvent the vapor recovery system.

**9. WRITTEN COMMENT:**

Section (d) “Equipment and Operation Requirements” could be simplified without changing the rule intent by stating that “A person shall not operate any gasoline dispensing facility unless each stationary underground storage tank is equipped with a CARB certified vapor recovery system by the dates specified in Section (i) of this rule.” All of the requirements stated in this section are incorporated in CARB Executive Orders for Phase I vapor recovery systems.

**DISTRICT RESPONSE:**

Section (d) provides equipment and operation requirements applicable to all Phase I vapor recovery systems. The CARB Executive Orders may contain additional requirements specific to a particular vapor recovery system. As of April 2005, all new and existing facilities were required to be equipped with the Enhanced Vapor Recovery (EVR) Phase I vapor recovery system. Therefore, Section (i) “Compliance Schedule” is no longer necessary and has been removed along with all references to it within Rule 61.3.1.

**10. WORKSHOP COMMENT:**

Section (d) requires all components be “... clearly identified by a permanent identification showing the manufacturer’s name, model number and a unique serial number...”. Many manufacturers use decals to provide identification of equipment. These decals fade or come off. The District should indicate that in such cases a Notice to Comply or a Notice to Repair will be issued. Alternatively, it can indicate that the verification of equipment make or manufacturer should be provided within 7 days without being considered a rule violation.

**DISTRICT RESPONSE:**

This situation is currently addressed by the District's Rule 6 “Minor Violations.” This rule classifies an absence of permanent identification on vapor recovery equipment as a minor violation. The rule specifies that “... when a minor violation is detected in the normal course of an inspection ...” a Notice to Comply will be issued to an owner or an operator of a facility. However, the rule also states that if a person or a facility received a Notice to Comply for a similar infraction within the previous 36 months, or the last 3 inspection cycles, whichever comes first, a Notice of Violation will be issued.

**11. WORKSHOP COMMENT:**

The District should require manufacturers to provide certified vapor recovery equipment with permanent identification.

**DISTRICT RESPONSE:**

The District has no jurisdiction over the manufacturers of vapor recovery equipment. That authority resides with CARB. The CARB Vapor Recovery Certification Procedures (CP-201), Section 9.4.1 already requires "... all components of vapor recovery systems be permanently identified with the manufacturer's name, part number and a unique serial number."

**12. WORKSHOP COMMENT:**

Section (d) states that facilities have to comply with the most recent CARB certification procedures and CARB Executive Orders. If CARB certifies a new version of the currently installed vapor recovery system, does the facility have to automatically upgrade the vapor recovery system to comply with the latest version of the Executive Order?

**DISTRICT RESPONSE:**

No. The Health and Safety Code provides that, in general, the District cannot require a currently installed system to be removed for a period of four years from the date of revocation or substantive modification of a CARB Executive Order. However, this does not apply in certain cases of system components where the newly certified components, such as pressure/vacuum (P/V) valves, hoses, or nozzles are compatible with existing systems. In that case, when existing components are replaced, CARB regulations may require they be replaced with the newly-certified system components.

**13. WRITTEN COMMENT:**

Section (d) states that facilities have to comply with the most recent CARB certification procedures and CARB Executive Orders. If a facility complies with the most recent Executive Order, but the facility Permit to Operate references an older version of the Executive Order, would a facility be out of compliance with its permit conditions?

**DISTRICT RESPONSE:**

No. A facility complying with a more recent CARB Executive Order for the make and model of vapor recovery system installed at the facility would not be in violation of that permit requirement.

**14. WORKSHOP COMMENT:**

Section (d) specifies a static rotational torque requirement of 108 pound-inch. This torque standard applies to the Phil-Tite vapor recovery system. The specific torque standard should not be included in case there are other vapor recovery systems that require a different torque standard.

**DISTRICT RESPONSE:**

CARB's vapor recovery regulation, CP-201, states that a torque standard of 108 pound-inch is applicable to all Phase I vapor recovery systems. Nevertheless, Section (d) of proposed Rule 61.3.1 also states that its provisions are applicable "... when required by the applicable CARB Executive Order...". The rule allows future flexibility should CARB establish alternative system-specific requirements in Executive Orders.

**15. WORKSHOP COMMENT:**

The District should consider moving the sentence in Section (d) “Each spill box shall be maintained free of standing gasoline...” to a different part of the section. It should be clear that this requirement is an actual emission standard.

**DISTRICT RESPONSE:**

The District disagrees. That requirement is in a subsection that includes other emission-related operating standards such as the allowable rotational torque for vapor and liquid adaptors. It is appropriate to include the operational standards with the equipment standards for spill boxes to avoid future confusion or oversights.

**16. WORKSHOP COMMENT:**

Section (d) specifies that “Each spill box shall be maintained free of standing gasoline and free of any debris.” Is there any parameter that defines how much gasoline can be left in a spill box to be still considered “free of standing gasoline”?

**DISTRICT RESPONSE:**

Current District policy specifies that “free of standing gasoline” means that the depth of gasoline in the spill box is 1/16 of an inch or less.

**17. WORKSHOP COMMENT:**

Subsection (d)(3)(vii) applies to both the owner of a GDF and the driver of a delivery truck. The burden should not fall on the owner, but on the delivery driver. The owner has no way of knowing the condition of the delivery truck equipment until fueling has commenced.

**DISTRICT RESPONSE:**

The District generally holds the cargo tank delivery driver responsible for compliance with this requirement. However, this standard does provide the District with some flexibility to hold both the GDF owner and the delivery driver accountable if a particular company or driver repeatedly fails to connect properly, to disconnect properly, or has defective equipment, and the facility fails to ensure that these deficiencies are corrected.

**18. WORKSHOP COMMENT:**

The frequency of inspections in Table 1 is not consistent with current permit conditions. Will the District revise the existing permits to make them consistent with the new rules?

**DISTRICT RESPONSE:**

Yes. After the new rules are adopted, the District will revise the permit conditions to reflect any changes that result from new rule requirements. However, permit conditions that reflect agreements between the District and affected parties for increased inspections, maintenance and testing to resolve past non-compliance concerns will not be directly impacted by the rule changes.

**19. WORKSHOP COMMENT:**

Section (e) should require only a visual inspection to ensure that the popped dry breaks and adaptors are operable and sealing properly. It would be very costly for a facility to perform the tests required by the certification procedures.

**DISTRICT RESPONSE:**

It is not necessary for an operator to perform the tests required by the certification procedures to comply with this requirement. An owner or operator should visually verify that vapor poppets move freely and are properly sealed, and should confirm the absence of vapor leaks by applying a leak detection solution to sealing surfaces.

**20. WORKSHOP COMMENT:**

Section (e) requires a periodic inspection to check that there is no standing gasoline or debris in the spill boxes. It should be clarified that this requirement applies at all times.

**DISTRICT RESPONSE:**

Unless otherwise stated, all rule requirements apply at all times [see Section (d)]. This requirement does not need further clarification.

**21. WORKSHOP COMMENT:**

Section (e) requires an annual inspection of vapor recovery equipment at a facility. The District should provide facilities with a form that could be used when performing the inspections.

**DISTRICT RESPONSE:**

The District has compiled various forms to assist facilities with compliance inspections. These forms are available on the District's website at [www.sdapcd.org/comply/vapor/VRforms.html](http://www.sdapcd.org/comply/vapor/VRforms.html) or by calling the District's Compliance Division at (858) 650-4550.

**22. WORKSHOP COMMENT:**

Section (e) states that an annual inspection should be performed to ensure that "The Phase I vapor recovery system is properly installed and complies with the most recent applicable CARB certification procedures." This subsection should state that the vapor recovery system should be operated in accordance with the most recent applicable CARB Executive Orders.

**DISTRICT RESPONSE:**

The District agrees and has added the Executive Order reference. Proposed Section (e) now cites compliance with the most recent applicable CARB certification procedures and Executive Orders. The same revision has been made in Rule 61.4.1, Section (e).

**23. WORKSHOP COMMENT:**

Section (e) states that an annual inspection should be performed to ensure that each pressure/vacuum valve is "... properly installed and functions in accordance with the most recent applicable CARB Executive Order." Is there an actual test that is required to verify this requirement? If so, the District should include this test in Section (h) "Test Methods." The cost of conducting this test should be included in the Socioeconomic Impact Assessment.

**DISTRICT RESPONSE:**

Section (e) has been revised. It now states that during an annual inspection an owner or operator should ensure that the vent pipes are equipped with the required P/V valves and each valve is properly installed. The periodic compliance test required in Section (f) will verify whether such valves are functioning properly. District permits already require that P/V valves be tested annually using CARB test procedure TP-201.1E "Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves." No additional costs will be incurred by affected facilities.

**24. WORKSHOP COMMENT:**

Section (e) requires components that are not in good condition or not operating properly be brought into compliance within seven calendar days of detection. What is the facility's compliance status during those seven days? What happens if a facility takes the component out of service while a replacement part is being ordered?

**DISTRICT RESPONSE:**

For a component that is not in good operating condition but not a defect as defined in Title 17 of the California Code of Regulations (CCR), the facility would be in compliance provided the component is repaired or replaced within seven days from the date the component malfunction was documented in the facility's inspection records. The facility would also be in compliance if it removed the component from service within the seven days. If, however, a District inspector finds a malfunctioning component that has not been recorded by the operator or, if recorded, has not been repaired or removed within seven days, the facility would not be in compliance and may receive a Notice of Violation.

**25. WORKSHOP COMMENT:**

Section (f) requires source tests be conducted "... in accordance with the most recent applicable CARB Executive Orders and CARB Certification Procedures." The reference to "CARB Certification Procedures" should be removed.

**DISTRICT RESPONSE:**

The District disagrees. Test procedures that are required to be used at GDF's are sometimes specified by CARB in the certification procedures and not always included in the applicable CARB Executive Orders.

**26. WORKSHOP COMMENT:**

Section (f) specifies that periodic compliance source tests may be conducted more frequently than once a year as determined necessary by the Air Pollution Control Officer...". Requiring more frequent testing would place an unnecessary burden on facilities. Any additional testing requirements should be handled through a settlement agreement and not through this rule.

**DISTRICT RESPONSE:**

The District disagrees. This requirement is consistent with other District rules. It enables the District to require additional testing at facilities that frequently violate requirements, or if required by CARB. If facilities disagree with the more frequent testing requirement imposed by the District they can appeal to the Air Pollution Control District Hearing Board.

**27. WRITTEN COMMENT:**

The District should include in the rule a list of tests that the operators are required to perform on an annual basis.

**DISTRICT RESPONSE:**

The type of tests to be performed will depend on the type of vapor recovery system a facility has, and may change in the future depending on the design of vapor recovery systems certified by CARB. The tests required will be identified in the Permit to Operate specific for each type of vapor recovery system installed.

**28. WORKSHOP COMMENT:**

Section (f) requires testers to complete the South Coast Air Quality Management District's (SCAQMD) Orientation class. Part of the class requires the SCAQMD staff to witness the testers during an actual test. An agreement should be made with the SCAQMD for local District staff to witness actual tests of those testers that only work locally.

**DISTRICT RESPONSE:**

Based on the information available to the District, all local testers are presently certified by SCAQMD and also conduct tests in that district. If there is a future need for a contractor to be observed while testing in San Diego County as suggested, the District will coordinate the test witnessing with SCAQMD.

**29. WORKSHOP COMMENT:**

Two subsections in Section (g) require that the name of the person performing the repairs be documented. This appears to be redundant. The District should consider removing one of the two requirements.

**DISTRICT RESPONSE:**

The rule no longer specifies the detailed information to be kept in the repair log. Instead, it requires a facility to maintain all records and information specified by the most recent applicable CARB Executive Order. For example, CARB Executive Order No. VR-102-E for the OPW EVR Phase I vapor recovery system requires an owner or operator to keep records of maintenance performed at the facility. The executive order specifies that the records shall include, at a minimum, the maintenance and repair date, the maintenance performed, and the company name, phone number and the name of the person who performed the maintenance or repair. Similar requirements are contained in CARB Executive Order VR-201-A for the Healy EVR Phase II vapor recovery system.

**30. WORKSHOP COMMENT:**

Section (g) requires maintaining receipts for parts used in a vapor recovery system repair. For proprietary reasons, the District should allow other types of documentation to be used instead.

**DISTRICT RESPONSE:**

Please see District Response to Comment No. 29.

**31. WRITTEN COMMENT:**

Section (g) requires work orders which include the name and signature of the person responsible for performing repairs to be included in the repair log. The District should clarify why this verification or level of detail in addition to repair logs is required. This provision puts a facility at risk of receiving a Notice of Violation if work orders are misplaced during the three years they are required to be maintained.

**DISTRICT RESPONSE:**

Please see District Response to Comment No. 29.

**32. WORKSHOP COMMENT:**

Section (g) requires source test records be kept. If all the information is provided in the test report, is an additional log needed to comply with this requirement? Who is required to maintain this information?

**DISTRICT RESPONSE:**

If all the required information is provided in the test report, no additional logs are necessary. The facility's owner/operator is required to maintain all records required by the rule.

**33. WRITTEN COMMENT:**

Section (g) requires thorough completion of the District's test forms. The District should provide additional guidance for filling out the test forms and this guidance should be included as part of each form.

**DISTRICT RESPONSE:**

The District has developed various forms available on-line to assist facilities. They can be found on the District's website at [www.sdapcd.org/comply/vapor/VRforms.html](http://www.sdapcd.org/comply/vapor/VRforms.html). The test forms are designed to be completed by the tester. Should any tester require additional help, the District has an ongoing outreach program and will provide further assistance.

**34. WORKSHOP COMMENT:**

In Section (h), the District should clearly identify those test methods that are to be performed by a facility and those performed by CARB.

**DISTRICT RESPONSE:**

Subsections (h)(1) and (h)(2) specify the test methods that are unique to CARB to certify individual vapor recovery control systems. Subsections (h)(3), (4), and (5) specify methods that could be used by operators, contractors, the District, or CARB to evaluate installations for compliance with certain requirements. However, because CARB-specified test methods have been changed frequently, it was impractical to list all of them in the rules. The test methods to be performed by a facility are specific to the type of vapor recovery system used at the facility. A facility's Permit to Operate will contain the test methods that the facility is required to perform, specific to the vapor control systems installed at the facility.

**35. WORKSHOP COMMENT:**

Section (h) specifies a test procedure to determine the control efficiency when certifying a Phase I vapor recovery system. This test method should be removed since it is for the certification of the system and is not required to be performed by a facility.

**DISTRICT RESPONSE:**

The District disagrees. When a standard in a rule calls for a specific emission limit or control requirement (e.g., 98% control efficiency), EPA requires that a corresponding test method for determining compliance with this standard be included in the rule.

**36. WORKSHOP COMMENT:**

Section (h) specifies a test procedure to determine the Reid vapor pressure of gasoline. This test method should be removed since it is not required to be performed by a facility.

**DISTRICT RESPONSE:**

The cited test procedure is needed in the event there is a question about rule applicability for a gasoline blend whose vapor pressure is close to the threshold specified in the rule's definition of "gasoline."

## PROPOSED NEW RULE 61.4.1

**37. WORKSHOP COMMENT:**

Section (b) provides an exception for the fueling of aircraft and/or intermediate aircraft refuelers, and the fueling of boats. What is the justification for giving this exemption?

**DISTRICT RESPONSE:**

This exemption was retained from current Rule 61.4 and has been in place for many years. The exemption was originally allowed because of concerns of safety and technical feasibility for vapor recovery during fueling of aircraft and boats. This exemption is not being reconsidered at this time and will be retained for clarity.

**38. WORKSHOP COMMENT:**

Section (c) should include a definition for Title 17 defects.

**DISTRICT RESPONSE:**

The District agrees. A definition for Title 17 Defects has been included in the rule. The definition has also been added to Rule 61.3.1.



**39. WRITTEN COMMENT:**

The definition for annual gasoline throughput in Section (c) should refer to the volume of gasoline dispensed during the year.

**DISTRICT RESPONSE:**

The District agrees and has revised the definition in Section (c) as suggested. The definition in proposed Rule 61.3.1 has also been revised.

**40. WRITTEN COMMENT:**

An annual inspection is defined in Section (c) as an inspection conducted once every 12 calendar months. During the workshop, staff confirmed that an annual inspection could be performed anytime within the twelfth month after the previous inspection. It does not need to be conducted exactly 365 days after the previous inspection. The definition should be changed to reflect the intent of the rule.

**DISTRICT RESPONSE:**

The District disagrees. The intent of the rule is to specify that an annual inspection must be conducted every twelve months not every 365 days. The definition means that the inspection can be performed anytime during the required month.

**41. WRITTEN COMMENT:**

Section (c) should be revised to specify that a faceplate is a donut-shaped assembly attached to the end of a vapor recovery nozzle.

**DISTRICT RESPONSE:**

The District agrees and has revised the definition in Section (c) as suggested.

**42. WRITTEN COMMENT:**

Section (c) should be clarified to define "In Station Diagnostics (ISD)" as equipment that monitors vapor recovery system parameters and components, and alerts the station operator when a failure mode is detected so that corrective action can be taken.

**DISTRICT RESPONSE:**

The District agrees and has revised the definition in Section (c) as suggested. In addition, the last phrase has been changed to "... when certain failure modes are detected so that corrective action can be taken." This change is to make clear that, as currently designed, ISD systems will not identify all possible failure modes.

**43. WRITTEN COMMENT:**

The definition of monthly gasoline throughput should be revised to indicate that it refers to the volume of gasoline dispensed during the month.

**DISTRICT RESPONSE:**

The District agrees and has revised the definition in Section (c) as suggested. The definition in proposed Rule 61.3.1 has also been revised.

**44. WRITTEN COMMENT:**

The definition of a Phase II Vapor Recovery System in Section (c) should be clarified to exclude a reference to the storage of gasoline. The Phase II vapor recovery system is intended to control emissions from vehicle refueling.

**DISTRICT RESPONSE:**

The District disagrees. The storage and dispensing of gasoline are inter-related because vapors from the dispensers are sent back to the underground storage tanks. The storage of vapors in the tanks, and the control of tank venting are integral to the overall emission control effectiveness of the Phase II system.

**45. WRITTEN COMMENT:**

The definition for vacuum-assist system in Section (c) should be revised to omit mentioning a compressor or a turbine as vacuum-producing devices. There are no vacuum assist systems that use a compressor or a turbine to produce a vacuum.

**DISTRICT RESPONSE:**

The District agrees and has revised the definition in Section (c) as suggested.

**46. WORKSHOP COMMENT:**

The District should remove either Subsection (d)(3)(i) or (d)(3)(ii) from the rule. If a facility installs a CARB certified system, it will automatically be in compliance with all the specific requirements of the Phase II vapor recovery system.

**DISTRICT RESPONSE:**

These subsections identify separate requirements. Subsection (d)(3)(i) provides a general requirement for a facility to install a CARB certified Phase II vapor recovery system that is also compatible with the Phase I system. This provision applies to existing stations with certified Phase II systems, to On-Board Refueling Vapor Recovery (ORVR) -compatible Phase II upgrades and to EVR Phase II upgrades in the future.

Subsection (d)(3)(ii) provides requirements for Phase II vapor recovery system control efficiency and emission factors specific to EVR certified Phase II systems. It will apply to facilities according to the compliance dates in Section (i).

**47. WRITTEN COMMENT:**

Subsection (d)(3)(ii) should be deleted. It is redundant with Subsection (d)(3)(i) because EVR Phase II vapor recovery systems need to meet the specified efficiency or mass emission factors in order to be certified by CARB. At this time, no EVR Phase II system has been certified. The Executive Orders for currently certified pre-EVR Phase II systems do not specify a mass emission factor. Consequently, pre-EVR systems would be excluded from installation at new and existing gasoline transfer and dispensing stations. Eliminating Subsection (d)(3)(ii) will allow the installation of pre-EVR systems until EVR Phase II systems become certified.

**DISTRICT RESPONSE:**

The District disagrees. The rule [in Section (i)] does not require an existing facility to comply with the requirements of Subsection (d)(3)(ii) until January 2009. New facilities have to comply with Subsection (d)(3)(ii) by the dates specified by CARB once an EVR Phase II vapor recovery system has been certified. In addition, Subsection (i)(3) specifies that this date may be revised to coincide with later applicable compliance dates specified by CARB. Until that time, the rule does not preclude the continued use of pre-EVR systems.

**48. WORKSHOP COMMENT:**

Section (d) should be revised to remove the reference to a specific liquid removal rate because such rate would depend on the type of vapor recovery system.

**DISTRICT RESPONSE:**

The District disagrees. The minimum liquid removal rate of at least five milliliters per gallon of gasoline dispensed is specified in CP-201. In addition, Section (d) allows for a different minimum removal rate as specified in the most recent applicable CARB certification procedure.

**49. WORKSHOP COMMENT:**

Section (d) requires a facility to post the telephone number to call if a dispensing nozzle is malfunctioning. What is this number?

**DISTRICT RESPONSE:**

The toll-free number for use by the public in reporting problems with vapor recovery systems is 1-800-952-5588. This is a CARB complaint hot line.

**50. WORKSHOP COMMENT:**

Section (d) specifies the installation of a CARB certified ISD system for facilities dispensing more than 600,000 gallons of gasoline in any calendar year. Because this dispensing rate may be changed by CARB, the District should remove this rate and refer to CARB requirements.

**DISTRICT RESPONSE:**

At this time, the CARB EVR program requires facilities with an annual throughput of 600,000 gallons of gasoline or more to install ISD. However, the District has added a provision to modify this requirement if CARB changes the throughput criteria in the future.

**51. WORKSHOP COMMENT:**

Section (d) requires the installation of a unihose dispenser. CARB has changed this requirement and the change should be reflected in the rule.

**DISTRICT RESPONSE:**

Section (d) in the proposed rule is consistent with the latest revisions adopted by CARB. However, it has been revised for clarity.

**52. WORKSHOP COMMENT:**

Table 1 in Section (e) specifies the frequency of inspections for facilities with different throughputs. What should a facility do if its throughput is close to one of the thresholds specified in the table? Would the facility be required to perform more frequent inspections?

**DISTRICT RESPONSE:**

If during the course of a calendar year, a facility determines that its throughput is clearly going to be over the threshold indicated in Table 1, the facility should begin to perform more frequent inspections as outlined in Table 1 for the higher throughput. For future reference, the facility operator should also note this determination and the change to more frequent inspection in the records maintained pursuant to Section (g). If in doubt, the facility operator can consult with the District before beginning to perform the inspections required for the higher throughput. For retail facilities with gasoline throughput at or above 750,000 gallons/year, the additional requirement is to conduct inspections on weekends and holidays, in addition to weekdays. For non-retail facilities with gasoline throughput at or above one million gallons/year, the additional requirement is to conduct daily inspections (excluding weekends and holidays) rather than weekly inspections.

**53. WRITTEN COMMENT**

Inspection frequencies specified in Table 1 are not consistent with current permit conditions. The District should revise either the rule or the permit conditions to be consistent with each other.

**DISTRICT RESPONSE:**

After Rule 61.4.1 is adopted, permit conditions will be updated to reflect any changes that result from rule requirements. However, permit conditions that reflect agreements between the District and affected parties for increased inspections, maintenance and testing to resolve past non-compliance concerns will not be directly impacted by the rule changes.

**54. WORKSHOP COMMENT:**

Section (e) requires a facility to check that the breakaway couplings have not separated. How would a facility comply with this requirement?

**DISTRICT RESPONSE:**

A facility should perform a visual check to ensure that the breakaway couplings have not partially or fully separated.

**55. WORKSHOP COMMENT:**

The District should clarify that the defects referred to in Subsection (e)(1)(iii) are those defined in the Title 17 of the CCR.

**DISTRICT RESPONSE:**

The District agrees and has revised Subsection (e)(1)(iii) as suggested.

**56. WRITTEN COMMENT:**

Section (e) should be revised to directly require draining of the vapor hose and recording the volume of gasoline removed instead of just conducting a weekly inspection.

**DISTRICT RESPONSE:**

The District agrees and has revised Section (e) as suggested.

**57. WRITTEN COMMENT:**

Subsections (e)(2) and (e)(3) require weekly and monthly inspections. The rule should require the use of the currently approved District forms.

**DISTRICT RESPONSE:**

It is not necessary to use District-approved forms as long as all the required parameters are recorded in the forms used. Some operators have objected to a requirement for District approved forms because it adds an unnecessary compliance liability. There are example forms on the District's website to assist facilities with their inspections. These forms are available at [www.sdapcd.org/comply/vapor/VRforms.html](http://www.sdapcd.org/comply/vapor/VRforms.html) or by calling the District at (858) 650-4550.

**58. WORKSHOP COMMENT:**

Section (e) requires monthly verification of dispensing flow rate for each nozzle and gasoline grade. If one or two of the nozzle flow rates are below the minimum requirement, do the records have to show the results of a retest after the pump fuel filters have been replaced?

**DISTRICT RESPONSE:**

Yes. The District expects that if a test result shows a nozzle dispensing rate is below the minimum or above the maximum, the facility operator will take the nozzle out of service, correct the defect, recheck the dispensing rate to ensure it complies, place the nozzle back in service and record the final result and the repair. If a District inspector finds that an operator has not taken a nozzle out of service when the dispensing flow rate is below or above the requirement, it will be considered a rule violation.

**59. WORKSHOP COMMENT:**

What is the approved method of measuring the dispensing flow rate?

**DISTRICT RESPONSE:**

The District does not require any specific test method to verify the dispensing flow rate. A facility operator can check a nozzle's maximum flow rates by timing how long it takes to dispense at least 1.0 gallon of gasoline into a vehicle or appropriate gasoline container. If the check shows the nozzle flow rate may be out of the approved range, the check should be repeated before recording the result.

**60. WRITTEN COMMENT:**

Section (f) requires an initial compliance source test to be conducted within 60 days of the installation date of a new or modified GDF. This provision implies that if only the Phase I system is modified, then testing of the Phase II system would also be required. It is excessive to require

testing an EVR Phase II system when the modification only affects the Phase I system. Therefore, the District should revise Section (f) to require Phase II testing only when the Phase II system is modified or affected.

**DISTRICT RESPONSE:**

It is not the District's intent to require facilities to test Phase II vapor recovery systems if only a Phase I change has occurred. However, in some cases it is possible that a replacement or modification of the Phase I system may affect the performance of the Phase II system and require at least some compliance tests for both systems (e.g., pressure decay/leak test, liquid blockage test). Section (f) allows for this flexibility. Therefore, proposed Section (f) was not revised as suggested.

**61. WRITTEN COMMENT:**

Section (f) requires periodic compliance source tests be conducted at least once every 12 months. This implies that testing has to be performed within 365 days of the previous test. The present permit conditions require testing within 45 days prior to the permit renewal date; which depending on the date the previous year's tests were conducted, could be more or less than once every 12 months. Therefore, to maintain consistency with the permit, the rule provision should require instead that testing be conducted annually. The permit condition can then specify the time frame within the year testing has to be performed.

**DISTRICT RESPONSE:**

Section (f) does not require that testing be performed exactly 365 days after the previous test. However, for clarity, Section (f) has been amended to require compliance tests be conducted once every calendar year and in accordance with the schedule specified by the District.

**62. WORKSHOP COMMENT:**

Section (f) should specify the 15-day reporting requirement as stated in current permit conditions.

**DISTRICT RESPONSE:**

The District agrees. A subsection has been added to the rule to reflect this comment. The same change has been made in Rule 61.3.1.

**63. WORKSHOP COMMENT:**

The compliance dates currently specified in the rule should be deleted since CARB is likely to change them.

**DISTRICT RESPONSE:**

The proposed rule addresses this issue. Section (i) states that compliance dates for ORVR compatible Phase II, EVR Phase II and ISD systems may be revised by the District to coincide with applicable later dates as they are specified by CARB.

**64. WRITTEN COMMENT:**

Section (i) identifies future compliance dates with Subsection (d)(3)(ii) for new facilities. The compliance dates are at the very end of the rule and could easily be overlooked. The District should specify the compliance dates in Subsection (d)(3)(ii).

**DISTRICT RESPONSE:**

Subsection (d)(3)(ii) references Section (i) "Compliance Schedule" for the applicable compliance dates.

**GENERAL COMMENTS**

**65. WORKSHOP COMMENT:**

What is the District's procedure and time schedule for presenting the rules to the Air Pollution Control Board?

**DISTRICT RESPONSE:**

Following the workshop, the District prepared this workshop report and revised the proposed rules, as appropriate, in response to workshop comments. The workshop report together with the revised proposed rules is being mailed to all workshop participants and other interested parties. The District will present the proposed rules to the District's Advisory Committee. The District intends to submit both proposed rules to the Air Pollution Control Board in early 2006.

**66. WORKSHOP COMMENT:**

The District should consider putting together a binder tool kit to assist operators in complying with these rules.

**DISTRICT RESPONSE:**

The District has been working on this issue with a group of industry representatives. The majority of them indicated that they would prefer to have their own instruction materials for their dealers and employees and not be bound to a specific document prepared by the District. However, the District will continue to work with this group to develop the elements of a binder tool kit that will help service station operators that need assistance.

**67. WORKSHOP COMMENT:**

The District should include in the binder tool kit a list of the most frequent compliance failures. For example, what constitutes a Notice of Violation, Notice to Comply, or a Notice to Repair, what are the consequences of these notices and what needs to be done. A defined schedule of lower fines for non-emission related violations or paperwork violations should be available. It should be clear (either in the rule or in the binder tool kit) what constitutes a rule violation.

**DISTRICT RESPONSE:**

The District is continuing to work with the industry group to develop the elements of a binder tool kit that will address these issues. It should be noted that in general, fines for non-emission related violations are significantly lower than those for emission related violations. However, penalty amount would also depend on a facility's previous history regarding compliance with vapor recovery rules.

**68. WORKSHOP COMMENT:**

If the station operator identifies a problem in the daily inspection form and after further investigation it turns out not to be a problem, will the initial identification of the problem be considered by a District inspector as a rule violation?

**DISTRICT RESPONSE:**

No. If the incident is documented and followed up, the initial record will not be considered a rule violation.

**69. WORKSHOP COMMENT:**

An operator who routinely goes beyond the rule requirements, for example, inspecting equipment twice a year instead of annually, should be given a credit in case a District inspector finds the facility in violation of the rule.

**DISTRICT RESPONSE:**

Every facility owner/operator is responsible for ensuring ongoing compliance with District rules. An owner/operator who inspects and tests the facility vapor recovery systems more often than the minimum requirement is less likely to be in violation of rule requirements. If a facility does receive a Notice of Violation, any additional proactive practices of the owner or operator will be considered during the violation settlement process.

**70. WORKSHOP COMMENT:**

An operator should not be fined for recording a problem during the daily inspection if a malfunctioning component is taken out of service and is repaired within a reasonable period of time.

**DISTRICT RESPONSE:**

The District agrees. The rule provides for this in Subsection (e)(5)(i).

**71. WORKSHOP COMMENT:**

CARB vapor recovery rules are constantly changing. Therefore, the District should review its rules with industry on an annual basis so the rules could be changed if necessary.

**DISTRICT RESPONSE:**

The District's vapor recovery rules implement the state vapor recovery program. The District is open to discuss any issues which may arise when the requirements of the state program are changed. However, due to the lengthy rule development process, it is impossible to amend rules on a yearly basis. The District will continue to review changes to the state program and whether the District rules can adequately reflect those changes. It will provide affected parties with advisories, permit changes, or informational workshops as appropriate. If the rules contradict substantive emissions control requirements in the future, appropriate amendments will be developed.



**72. WORKSHOP COMMENT:**

The District should establish, as CARB has, an office of Industry Ombudsperson. This should be done for all regulated industries so that person could be a truly third party to mediate between the District and the regulated community in times of dispute.

**DISTRICT RESPONSE:**

The District has a small business assistance person that operates independently of the District's Engineering and Compliance divisions. The Small Business Assistance Specialist serves as a resource for small businesses and larger businesses.

**73. WORKSHOP COMMENT:**

Will the District require facilities to submit permit applications and associated fees to update the permit conditions?

**DISTRICT RESPONSE:**

The modification of permit conditions that result from the proposed rule changes will be made by the District without requiring any additional applications or application fees. Facilities will receive advance notice of the planned permit changes and an opportunity to provide comments or to object.

**74. WRITTEN COMMENT:**

Both proposed rules should include a requirement that owners of record as specified in the permit, be notified of all citations issued at a site within 24 hours. This requirement should be placed in a new section titled "Citations" inserted between "Definitions" and "Equipment and Operation Requirements."

**DISTRICT RESPONSE:**

No other District rules impose such a requirement. Typically, an inspector issues a notice, naming the Permit to Operate owner, to the on-site manager or on-site employee if the manager is not available. It should be the responsibility of the employee, manager or operator to notify the owner of citations. The District has and will continue to provide copies of citations to facility owners upon request. The District also recognizes this is a unique problem and will be making changes to its procedures to ensure that owners of record are notified expeditiously when a Notice of Violation is issued to a facility.

**75. WRITTEN COMMENT:**

Presently, the District accepts testing in accordance with test method TP-96-1 (10" pressure decay) in lieu of the CARB test method TP-201.3 (2" static pressure performance test). Is TP-96-1 still an acceptable alternative test procedure to TP-201.3?

**DISTRICT RESPONSE:**

Yes, TP-96-1 is an acceptable procedure in lieu of CARB test method TP-201.3.

**76. WRITTEN COMMENT:**

The proposed rules require more frequent equipment inspections, maintenance and testing for balance systems than the CARB Executive Orders or maintenance manuals. Source test frequencies

should be consistent with those specified in CARB Executive Orders for the specific vapor recovery systems.

**DISTRICT RESPONSE:**

The District disagrees. The rules establish minimum inspection and maintenance schedules for all vapor recovery systems. The inspection, maintenance and testing frequencies specified by the proposed rules are the minimum needed and, in some cases, may be not fully adequate to assure continuous compliance. In general, annual source test requirements are consistent with those specified by CARB in the most recent Executive Orders. However, in some cases where specific facilities are not adequately maintained, more frequent testing may be necessary to improve compliance.

**77. WRITTEN COMMENT:**

The vapor recovery rules should be easy to understand and to comply with. The rules should be self-contained and spell out exactly what is required for compliance. Operators should not have to research Executive Orders, the Health and Safety Code, Approval Letters, the CCR or even other District rules in order to determine what they need to do to comply.

**DISTRICT RESPONSE:**

Due to the complex and evolving nature of the state vapor recovery program, it is impossible to include in a rule every requirement for every system. State law prohibits CARB and the districts from specifying the exact design of emission control systems. System designs vary, and will continue to do so under the state's enhanced vapor recovery program. Thus, specific operational parameters (vacuum level, A/L ratio, pressure switch settings, etc.) can vary from system to system. Further, CARB's requirements can change in the future. The rules have been crafted to reflect this needed flexibility. Information on requirements pertinent to specific vapor recovery systems is provided for each facility in its Permit to Operate.

**ECONOMIC EVALUATION**

**Proposed New Rule 61.4.1 - Transfer of Gasoline from  
Stationary Underground Storage Tanks  
Into Vehicle Fuel Tanks**

Proposed new Rule 61.4.1 controls gasoline emissions from the transfer of gasoline into motor vehicle fuel tanks at gasoline dispensing facilities (GDFs). It applies to all retail stations where gasoline is dispensed from a stationary underground storage tank with a capacity of 250 gallons or more. It also applies to all non-retail stations where the gasoline is dispensed from a stationary underground storage tank with a capacity greater than 550 gallons and where more than 2000 gallons of gasoline are transferred in any calendar month.

**EMISSION REDUCTION POTENTIAL OF THE PROPOSED RULE**

**SOURCES AND EMISSIONS**

According to the 2004 District Emission Inventory, there are 704 retail gasoline dispensing stations in San Diego County with a total annual gasoline throughput of about 1.25 billion gallons (94.1% of the total county throughput) and 185 non-retail stations with a total annual throughput of about 78 million gallons (5.9%). All of them are subject to current District Rules 61.3 and 61.4 that require pre-enhanced vapor recovery (EVR) Phase I and Phase II vapor recovery systems. Phase I vapor recovery systems control volatile organic compounds (VOC) emissions during the transfer of gasoline from mobile tanks into underground storage tanks. Phase II vapor recovery systems control emissions from the transfer of gasoline from the underground storage tanks into motor vehicle fuel tanks.

In addition, there are 12 non-retail stations, each with an annual throughput less than 24,000 gallons, that are equipped with Phase I pre-EVR vapor recovery and are exempt from Phase II requirements. Their total annual gasoline throughput is 158,000 gallons, or 0.012% of the total throughput in the county. These stations will continue to be exempt from the Phase II requirements of new Rule 61.4.1.

Table 1 below shows the number of retail and non-retail GDFs that will be subject to Rule 61.4.1 Phase II vapor recovery requirements, and their corresponding aggregate annual gasoline throughputs.

**Table 1 Gasoline Dispensing Facilities in San Diego County**

Facility	Number of Facilities	Percent of Total Facilities	Total Throughput (1000 gal/yr)	Percent of Total Throughput
Retail	704	79.2%	1,250,007	94.1%
Non-Retail	185	20.8%	77,845	5.9%
Total	889	100.0%	1,327,852	100.0%

As expected, the bulk of gasoline in San Diego County is distributed through retail stations. They comprise about 79% of all facilities and dispense 94.1% of the total annual gasoline volume. Consequently, they are responsible for the large majority of VOC emissions from this source category. Non-retail stations (20.8% of total GDFs) account for the remaining 5.9% of annual gasoline throughput. The population distribution of GDFs according to their annual throughput is presented in Table 2 (retail facilities) and Table 3 (non-retail facilities).

**Table 2 Retail Gasoline Dispensing Facilities in San Diego County by Annual Throughput**

Annual Gasoline Throughput per facility (1,000 gal/yr)	Number of Facilities*	Percentage of Total Facilities	Cumulative Percentage of Facilities	Total Annual Throughput (1,000 gal/yr)	Percentage of Total Throughput	Cumulative Percentage of Throughput
>5,000	13	1.8	1.8	94,518	7.6	7.6
4,001 - 5,000	25	3.6	5.4	114,559	9.2	16.7
3,501 - 4,000	22	3.1	8.5	81,343	6.5	23.2
3,001 - 3,500	23	3.3	11.8	74,674	6.0	29.2
2,501 - 3,000	44	6.3	18.0	120,187	9.6	38.8
2,001 - 2,500	95	13.5	31.5	212,445	17.0	55.8
1,501 - 2,000	145	20.6	52.1	251,478	20.1	75.9
1,251 - 1,500	75	10.7	62.8	103,974	8.3	84.3
1,001 - 1,250	84	11.9	74.7	95,559	7.6	91.9
601 - 1000	81	11.5	86.2	65,124	5.2	97.1
501 - 600	24	3.4	89.6	13,502	1.1	98.2
301 - 500	41	5.8	95.5	15,796	1.3	99.5
101 - 300	29	4.1	99.6	6,612	0.5	100.0
< 100	3	0.4	100.0	235	0.02	100.0
	704	100.0		1,250,007	100.0	

\* Facilities with an annual throughput below 24,000 gallons are exempt from Phase II vapor recovery system requirements.

**Table 3 Non-Retail Gasoline Dispensing Facilities in San Diego County by Annual Throughput**

Annual Gasoline Throughput per facility (1,000 gal/yr)	Number of Facilities	Percentage of Total Facilities	Cumulative Percentage of Facilities	Total Annual Throughput (1,000 gal/yr)	Percentage of Total Throughput	Cumulative Percentage of Throughput
>1,000	14	7.6	7.6	54,023	69.4	69.4
601 - 1000	1	0.5	8.1	900	1.2	70.6
501 - 600	3	1.6	9.7	1,632	2.1	72.7
301 - 500	15	8.1	17.8	6,112	7.9	80.5
101 - 300	59	31.9	49.7	10,395	13.4	93.9
24* - 100	93	50.3	100.0	4,783	6.1	100.0
	185	100		77,845	100	

\* Facilities with an annual throughput below 24,000 gallons are exempt from Phase II vapor recovery system requirements.

The total VOC emissions from all gasoline dispensing operations in the District are estimated to be about 837 tons per year. This reflects current Phase I and Phase II vapor control systems which capture and control approximately 92% of gasoline vapor emissions. The VOC emission reductions as a result of the full implementation of the ARB EVR program will be about 447 tons per year, or 53.4% of current emissions. New Rule 61.3.1 which is now in effect (the final Compliance date was April 2005) should provide approximately 168 tons per year of these VOC emission reductions. Implementation of new Rule 61.4.1 as proposed is expected to reduce VOC emissions by approximately 279 tons per year by 2010 (the final rule implementation date).

### **COST-EFFECTIVENESS OF THE PROPOSED RULE**

At the time of ARB's initial EVR program adoption in 2000, ARB conducted an economic analysis of the proposed program<sup>1</sup>. The cost-effectiveness of the program was calculated for five model stations, starting from GDF1 (with less than 300,000 gallons annual gasoline throughput) to GDF5 (with more than 2,400,000 gallons of annual gasoline throughput) and by using a "typical throughput" for each GDF category. The "typical throughput" was calculated roughly as the average throughput for the GDF in each category (Reference 1, page 87, Table VI-3). For example, for GDF2 (with a monthly throughput range from 25,000 to 50,000 gallons), the typical throughput was chosen as 37,500 gallons/month (450,000 gallons/year).

In the 2000 ARB evaluation, the cost-effectiveness of the program for each model station was determined to range from \$12.49 (for the smallest model station) to \$0.63 (for the largest station) per pound of VOC reduced. The overall cost-effectiveness for the EVR program was estimated to be \$1.80 per pound of VOC reduced.

ARB also evaluated the potential impacts of the proposed EVR program on California businesses – specifically for retail GDFs, vapor recovery equipment manufacturers, distributors and contractors involved in testing and repair of vapor recovery equipment. ARB concluded that “the proposed regulation will not have a significant adverse impact on manufacturers and distributors of vapor control equipment. In the long run, these businesses if faced with a cost increase would pass it onto their consumers,” i.e., gasoline service stations. In their turn, gas station owners or operators were expected to pass their cost increase to their customers, i.e. the driving public.

ARB also estimated the potential economic impact on consumers. It concluded that “the EVR program would not impose an unreasonable burden on California businesses or the driving public. The cost of the program would be passed fully to motorists, resulting in an increase of about 0.24 cents per gallon in the average price of gasoline.”

In 2002, ARB conducted a technology review of the EVR Program<sup>2</sup>. The review concluded that almost all EVR standards are technologically feasible or are likely to be technologically feasible. One standard, related to the performance of a “dripleless nozzle” was modified. The cost of the program and its cost-effectiveness was revised to correct an error in the previous report. The overall cost-effectiveness for the EVR program was increased from \$1.80 to \$5.24 per pound of VOC reduced, with a corresponding increase in the cost-effectiveness for each model station to \$30.43 per pound (for the smallest model station) and \$2.18 per pound (for the largest station). The expected increase in a consumer gasoline price was revised from 0.24 to 0.68 cents per gallon of gasoline. The general conclusion remained that the program is cost-effective and will not impose any additional burden on consumers or affected businesses.

Table 4 below summarizes the final data for the estimated emission reductions and cost-effectiveness for each model GDF presented by ARB in their staff report for the 2002 Technology review<sup>2</sup>. For comparison, the table also includes the initial cost-effectiveness data from the ARB Staff Report issued in 2000<sup>1</sup>.

**Table 4 EVR Cost-Effectiveness per Model GDF<sup>1,2</sup>**

GDF Model	GDF 1	GDF 2	GDF 3	GDF 4	GDF 5
Typical throughput gallons per month	13,233	37,500	75,000	150,000	300,000
Throughput range, gallons per month (1000gallons per year)*	≤ 25,000 (≤ 300)	25,000 - 50,000 (300-600)	50,000 - 100,000 (600-1200)	100,000 - 200,000 (1200-2400)	>200,000 (>2400)
% Stations	4.7	14.1	45.7	31.3	4.2
EVR emission reductions, Statewide (tons/day)	0.15	1.36	8.82	12.10	3.27
2000 Staff Report Cost Effectiveness for both Phase I and Phase II, \$/lb**	12.49 with ISD	4.42	2.41	1.24	0.63
2002 Tech. Review Cost-effectiveness for both Phase I and Phase II, \$/lb	30.43 w/o ISD	10.76 w/ISD	6.60 w/ISD	4.26 w/ISD	2.18 w/ISD

\* Added for consistency with the District's annual throughput data.

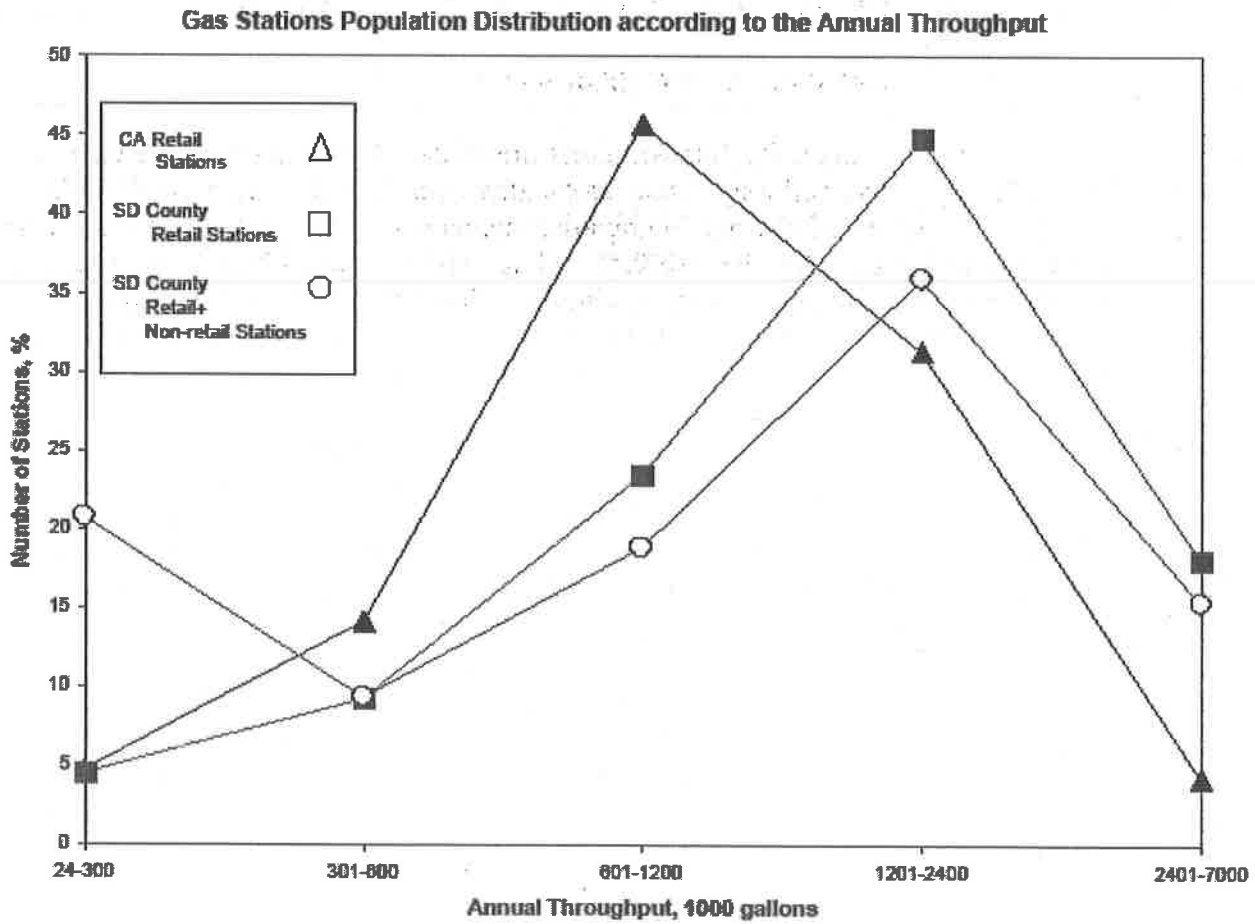
\*\* In the 2000 draft of the EVR program, In-Station Diagnostics (ISD) was required for all stations. The exemption from the ISD requirements for GDF2 was added at the December 2002 ARB Board Meeting. The cost-effectiveness was not recalculated.

The distribution of GDFs according to their monthly gasoline throughput presented in Table 4 was obtained by ARB from an EPA Technical Guidance Document for vapor recovery<sup>3</sup> published in 1991 (Table 2-9, pages 2-24). This reference contained the population distribution of only *retail* stations in 16 metropolitan areas in 1989. Non-retail stations may represent a significant part of all GDFs (21% in San Diego County) but were not considered by ARB in their emission reductions or cost-effectiveness calculations.

Table 5 and Figure 1 below provide a comparison of ARB's statewide model GDF population distribution with the distribution of stations in San Diego County. Since new Rules 61.3.1 and 61.4.1 regulate gasoline dispensing operations for both retail and non-retail stations, distribution of all stations subject to Phase II vapor recovery standards (retail and non-retail) was included.

**Table 5 GDF Population Distribution by Annual Throughput**

GDF Model	GDF 1	GDF 2	GDF 3	GDF 4	GDF 5
Annual Throughput Range 1000 gallons per year	<300	>300-600	>600-1,200	>1,200-2,400	>2,400
% Stations, (ARB) Retail only (1989)	4.7	14.1	45.7	31.3	4.2
% Stations, (SD) Retail only (2004)	4.5	9.2	23.4	44.8	18.0
% Stations, (SD) Retail & Non-retail (2004)	20.7	9.3	18.8	35.9	15.3



**Figure 1**



These data show that the distribution of *retail* stations according to their gasoline throughput in San Diego County generally remains similar to the statewide distribution although San Diego generally has more large retail stations than statewide. However, this distribution changes significantly when *non-retail* stations are included in the total GDF population. The change is especially pronounced for low-volume stations, such as GDF1 with a gasoline throughput of 300,000 gallons per year (25,000 gallons per month) or less. In San Diego County these stations account for 20.7% of the total gasoline stations. In addition, small non-retail GDFs with an annual throughput of 300,000 gallons or less represent the large majority (152 out of 185, or 82.7%) of *non-retail* stations in the District.

According to ARB's 2002 review, the cost-effectiveness of the EVR Program for a "typical" low-volume station is \$30.43 per pound VOC reduced (for both Phase I and Phase II EVR). ARB defined a "typical" station in this throughput range as a facility with two dispensers and an average monthly fuel sale of 13,233 gallons (~160,000 gallons per year) (Reference 1, page 87). However, in San Diego County there are many gas stations with annual gasoline throughputs less than 160,000 gallons. For example, there are 93 non-retail and 3 retail facilities with an annual throughput less than 100,000 gallons. Fourteen non-retail facilities have an annual throughput as low as 25,000 gallons. The cost-effectiveness of retrofitting these stations from pre-EVR Phase II controls to EVR Phase II will be significantly higher than that for larger stations.

The District has estimated the cost-effectiveness of EVR Phase II upgrades for two samples, low volume retail and low volume non-retail stations (less than 600,000 gal/year throughput). These are classified by ARB as GDF1 (< 300,000 gallons per year) and GDF2 (300,000 to 600,000 gallons per year). Annual throughputs and the actual number of dispensers for facilities used in these two samples were obtained from the District's permit files. The results are presented in Table 6 (for 11 existing retail facilities) and Table 7 (for 12 existing non-retail facilities) with annual gasoline throughputs less than 600,000 gallons. Facilities were chosen to provide 50,000 gallons per year throughput increments for the analysis.

The total cost of upgrading to an EVR Phase II system for these facilities was estimated as follows.

- Equipment and installation (fixed) costs were for the certified Healy Phase II EVR system (the only certified system available).
- Costs were added for initial permits and testing, additional annual Operation and Maintenance costs for the upgraded equipment, and additional annual testing.
- A capital recovery factor was calculated assuming 10 years recovery at 10% interest rate.
- An overall capture and control efficiency of the current Phase II vapor recovery system was assumed realistically to be about 90% and the overall efficiency of EVR Phase II was assumed to be about 95%.

As shown in Tables 6 and 7, the estimated cost-effectiveness varies from more than \$450 per pound of VOC reduced for stations with less than 40,000 gallons annual throughput, to \$30-\$40 per pound of VOC reduced for stations with 600,000 gallons annual throughput.

**Table 6 Cost-effectiveness of EVR Phase II for Retail Stations with an Annual Gasoline Throughput of less than 600,000 gallons**

Facility	Annual Gasoline Throughput (gal/year):	Number of Dispensers	Total Capital Cost (\$)	Total Annual Cost (\$/yr)	Emission Reductions (lbs/yr)	Cost - effectiveness (\$/lb of VOC reduced)
Retail Station #1	38,162	1	16,000	7,673	16.0	478.7
Retail Station #2	101,896	3	21,600	8,853	42.8	206.9
Retail Station #3	155,273	2	18,800	8,249	65.2	126.5
Retail Station #4	206,405	2	18,800	6,064	86.7	70.0
Retail Station #5	246,032	2	18,800	6,058	103.3	58.6
Retail Station #6	300,000	5	27,200	7,835	126.0	62.2
Retail Station #7	350,000	8	35,600	11,790	147.0	80.2
Retail Station #8	400,000	4	24,400	9,975	168.0	59.4
Retail Station #9	449,576	2	18,800	8,200	188.8	43.4
Retail Station #10	501,242	4	24,400	9,382	210.5	44.6
Retail Station #11	547,392	2	18,800	7,608	229.9	33.1
Retail Station #12	595,769	2	18,800	7,599	250.2	30.4

**Table 7 Cost-effectiveness of EVR Phase II for Non-Retail Stations with an Annual Gasoline Throughput of less than 600,000 gallons**

Facility	Annual Gasoline Throughput (gal/year):	Number of Dispensers	Total Capital Cost (\$)	Total Annual Cost (\$/yr)	Emission Reductions (lbs/yr)	Cost - effectiveness (\$/lb of VOC reduced)
Non-Retail Station #1	37,737	1	16,000	7,385	15.8	465.9
Non-Retail Station #2	104,400	1	16,000	7,278	43.8	166.0
Non-Retail Station #3	149,205	6	30,000	10,104	62.7	161.2
Non-Retail Station #4	204,000	4	24,400	8,904	85.7	103.9
Non-Retail Station #5	252,000	1	16,000	7,253	105.8	68.5
Non-Retail Station #6	300,000	1	16,000	7,341	126.0	58.3
Non-Retail Station #7	360,000	4	24,400	9,118	151.2	60.3
Non-Retail Station #8	390,000	6	30,000	10,112	163.8	61.7
Non-Retail Station #9	448,489	6	30,000	10,198	188.4	54.1
Non-Retail Station #10	480,000	2	18,800	7,619	201.6	37.8
Non-Retail Station #11	540,000	4	24,400	8,800	226.8	38.8

The District's calculated cost of upgrading to EVR Phase II is much higher than that estimated by ARB. The major reason for this is that ARB did not consider any regulatory costs that will be incurred by the affected facilities, specifically, permit modification costs and additional initial and annual source testing costs. Additional costs for the operation and maintenance of new upgraded vapor recovery equipment also were not taken into account by ARB but were included in the District's analysis. It should be noted that all these estimates are somewhat preliminary because only one Phase II EVR vapor recovery system is currently certified by ARB. It is expected that prices for such systems will decline when more of them are in production and certified by ARB.

**Foregone Future Emission Reductions**

The District has estimated the projected loss of future VOC emission reductions if small stations were exempt from future Phase II EVR requirements. Table 8 below shows the projected loss of emission reductions, and the number and percent of the total GDFs for three categories of low-volume facilities. The data clearly indicate that exempting such facilities from EVR Phase II upgrades will not significantly affect the total projected emission reductions but will lift the burden of significant additional costs from a large number of small facilities.

**Table 8 Potential Exemption Levels and Corresponding Loss of Projected Emission Reductions**

Annual Gasoline Throughput per GDF	Number of Exempted Stations			% of Total Stations	Emission Reduction Foregone (tons per year)			% of Total Phase II EVR Program Emission Reductions
	Retail	Non-Retail	Total		Retail	Non-Retail	Total	
All stations with less than 300,000 gal/yr	32	152	184	20.7	1.44	3.19	4.63	1.7
All stations with less than 500,000 gal/yr	73	167	240	27.0	4.76	4.47	9.23	3.3
All stations with less than 600,000 gal/yr	97	170	267	30.0	7.59	4.81	12.4	4.4

For example, exempting facilities with less than 600,000 gallon annual throughputs from Phase II EVR upgrades would result in a 4.4% loss of the projected VOC emission reductions from the proposed rule, or about 12.4 tons/year, and 2.8% of the projected emission reductions from the total EVR Program for San Diego County. At the same time, approximately 97% of the total gasoline throughput in the county would be controlled with EVR Phase II (Table 9 and Figure 2), and 267 existing facilities in the county (30% of the total affected by the rule) would avoid costly retrofits and would continue to maintain their current (pre-EVR) Phase II vapor recovery systems.

**Table 9 Gasoline Dispensing Facilities in San Diego County - Retail and Non-Retail Stations**

Annual Gasoline Throughput per Facility (1,000 gal/yr)	Number of Facilities	Percentage of Total Facilities	Cumulative Percentage of Facilities	Total Annual Throughput (1,000 gal/yr)	Percentage of Total Throughput	Cumulative Percentage of Throughput
>5,000	17	1.9	1.9	122,218	9.2	9.2
4,001 - 5,000	26	2.9	4.8	118,957	9.0	18.2
3,501 - 4,000	24	2.7	7.5	88,576	6.7	24.8
3,000 - 3,500	24	2.7	10.2	78,108	5.9	30.7
2,501 - 3,000	45	5.1	15.3	123,139	9.3	40.0
2,001 - 2,500	96	10.8	26.1	214,719	16.2	56.2
1,501 - 2,000	146	16.4	42.5	253,398	19.1	75.2
1,251 - 1,500	77	8.7	51.2	106,887	8.0	83.3
1,001 - 1,250	85	9.6	60.7	96,759	7.3	90.6
601 - 1,000	82	9.2	70.0	66,024	5.0	95.6
501 - 600	27	3.0	73.0	15,134	1.1	96.7
301 - 500	56	6.3	79.3	21,908	1.6	98.3
100 - 300	90	10.1	89.4	17,206	1.3	99.6
< 100	94	10.6	100.0	4,818	0.36	100.0
	889	100.0		1,327,852	100.0	

**Conclusions**

As shown in the above analysis, the estimated cost-effectiveness of EVR Phase II for low-volume stations is significantly higher than the highest cost-effectiveness value (typically \$6 to \$7 per pound) used by this District as guidance in adopting rules regulating VOC and NOx emissions. The District is also concerned that the Phase II EVR program for existing low-volume stations (less than 600,000 gallons annual throughput) would have very high costs while achieving comparatively small emission reductions.

The District has discussed the results of this analysis with ARB staff. ARB staff responded that the District has to implement and enforce vapor recovery regulations as they are promulgated by ARB, effectively disallowing any exemptions based on economic feasibility or cost-effectiveness for small facilities.

However, both agencies agreed that the cost-effectiveness of low-volume stations should be reconsidered. They also agreed that the District and ARB will work together over the next 18 months to re-evaluate Phase II EVR cost-effectiveness for low-volume GDFs. ARB staff also stated that if it was determined that Phase II EVR was not cost-effective, ARB would propose emergency regulations to revise its requirements for low-volume gas stations.

## References

1. Air Resources Board; Enhanced Vapor Recovery; Hearing Notice and Staff Report: *Initial Statement of Reasons for Proposed Amendments to the Vapor Recovery Certification and Test Procedures for Gasoline Loading and Motor Vehicle Gasoline Refueling at Service Stations*. February 4, 2000, page 79.
2. Air Resources Board; Hearing Notice and Staff Report: *Initial Statement of Reasons for Proposed Rulemaking to Consider the Enhanced Vapor Recovery Technology Review and Proposed Amendments of Vapor Recovery System Certification and Test Procedures for Gasoline Marketing Operations at Service Stations*. October 25, 2002, page 30, Table VI-1.
3. *Technical Guidance - Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities*, Volume I: Chapters USEPA, OAQPS. November 1991.

**COMPARATIVE ANALYSIS FOR****Rule 61.3.1 - Transfer of Gasoline Into  
Stationary Underground Storage Tanks  
and****Rule 61.4.1 - Transfer of Gasoline from  
Stationary Underground Storage Tanks  
Into Vehicle Fuel Tanks.**

Pursuant to California Health and Safety Code Section 40727, the District is required prior to adopting, amending, or repealing a rule or regulation, to make findings of necessity, authority, clarity, consistency, reference, and non-duplication. As part of the consistency finding to ensure proposed rule requirements do not conflict with or contradict other Air Pollution Control District (District) or federal regulations, Health and Safety Code Section 40727.2 (a) requires the District to perform a written analysis identifying and comparing the air pollution control standards and other provisions of proposed new rules with existing rules and guidelines and existing federal rules, requirements, and guidelines applying to the same source category.

New Rules 61.3.1 and 61.4.1 have been developed to control volatile organic compounds (VOC) emissions from gasoline storage, transfer and dispensing operations. They implement the most recent version of the statewide Enhanced Vapor Recovery program and fulfill the District's obligations under State law and its current Regional Air Quality Strategy. Rule 61.3.1 applies to the transfer of gasoline from mobile transport tanks into stationary underground storage tanks. Rule 61.4.1 applies to the transfer of gasoline from stationary underground storage tank into motor vehicle fuel tanks.

There are two existing District rules that apply to the same facilities, Rule 61.3 (Transfer of Volatile Organic Compounds into Stationary Storage Tanks) and Rule 61.4 (Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks). These rules are also included in the federally-enforceable State Implementation Plan and represent both federal and District requirements.

In addition, the sources subject to new proposed Rules 61.3.1 and 61.4.1 are required to meet the Best Available Control Technology (BACT) requirements of the New Source Review, which is developed according to federal guidelines.

A detailed comparison of proposed new Rule 61.3.1 with Rule 61.3 and BACT requirements is provided in Table I. A detailed comparison of proposed new Rule 61.4.1 with Rule 61.4 and BACT requirements is provided in Table II.

As seen from the tables, the new proposed rules have more stringent emission and operational standards than the existing rules because they reflect the more rigorous State program. The existing rules have, however, a broader applicability. They regulate the storage and transfer of other VOC such as alcohols, ketones, and organic acids and control VOC emissions from aboveground storage tanks. These operations and sources are not subject to the new rules.

There are no conflicts or contradictions between the requirements of new proposed rules and existing federal or District regulations.

**Table I - Comparative Analysis of Rule 61.3.1**

Items for Comparison	Rule 61.3.1	Rule 61.3	Best Available Control Technology (BACT)
Applicability	Transfer of gasoline only into underground storage tanks with a capacity of 250 gallons (946 liters) or more.	Transfer of gasoline and other VOC (as defined in Rule 61.0) into underground and aboveground storage tanks with a capacity of 260 gallons (984 liters) or more.	New gasoline dispensing facility (GDF) with an annual gasoline throughput >1 million gallons and any existing GDF proposing a throughput increase of 1 million per year or greater.
Exemptions	<ul style="list-style-type: none"> <li>- Transfers into tanks exclusively for fueling agricultural wind machines;</li> <li>- Transfers into tanks when conducted by the San Diego County Department of Weights and Measures;</li> <li>- Transfers from mobile tanks into tanks with a capacity of 550 gallons or less and located at any non-retail facility.</li> </ul>	Same as in Rule 61.3.1.	Same as in Rule 61.3.1.
Equipment and Operation Requirements	<ul style="list-style-type: none"> <li>• The Phase I vapor recovery system must be equipped with California Air Resources Board (CARB) certified components;</li> <li>• Each stationary underground storage tank must have a Phase I vapor recovery system with a minimum 98% control efficiency;</li> <li>• The system must be installed, operated, and maintained in accordance with recent applicable CARB certification procedures and Executive Orders;</li> <li>• Each tank must be equipped with a CARB certified permanent submerged drop-tube;</li> <li>• The vapor recovery system and associated components except for components with an allowable leak rate must be maintained free of liquid and vapor leaks. Components with an allowable leak rate must operate within such rate;</li> <li>• Connect/disconnect procedures are specified for gasoline transfers from a cargo tank into an underground storage tank. Both a gas station operator and any person conducting the gasoline transfer are responsible for complying with these procedures;</li> <li>• Contractors and installers are required to complete a manufacturer's training program and any relevant program required by CARB or the District.</li> </ul>	<ul style="list-style-type: none"> <li>• The Phase I vapor recovery system must be CARB certified;</li> <li>• Each storage tank must have a Phase I vapor recovery system with a minimum 95% control efficiency;</li> <li>• Each tank must be equipped with a permanent submerged operable drop-tube;</li> <li>• Specifies a mass emission rate for aboveground tanks;</li> <li>• Specifies requirements for tanks in use prior to July 1, 1978.</li> </ul>	Same as in Rule 61.3.1.

Table I - Comparative Analysis of Rule 61.3.1 - Continued

Items for Comparison	Rule 61.3.1	Rule 61.3	New Source Review Rules, Best Available Control Technology (BACT)
Inspection & Maintenance (I&M) Program	<p>An I&amp;M program must be implemented to ensure proper operation of the vapor recovery system. The program must be implemented by a facility representative and include, at a minimum, the following:</p> <ul style="list-style-type: none"> <li>• Periodic inspection of the system components, such as storage tank fill caps and gaskets, popped dry breaks, gasoline vapor and liquid adaptors, and spill boxes. The frequency of periodic inspections is specified for retail and non-retail facilities;</li> <li>• An annual inspection of submerged drop-tubes and pressure-vacuum valves on vent pipes;</li> <li>• An annual inspection to ensure compliance with all applicable District rules and regulations, all permit conditions, and all applicable CARB Executive Orders.</li> </ul> <p><u>Maintenance Procedures</u></p> <ul style="list-style-type: none"> <li>• The I&amp;M program requires that components identified and recorded as not being in good condition be repaired, replaced, or adjusted within 7 calendar days. Use of any component having a Title 17 defect or a defect identified in the CARB Executive Order is prohibited.</li> </ul>	None	Same as in Rule 61.3.1.
Source Testing	Requires conducting an initial compliance test and subsequent periodic compliance tests (at least annual). A person conducting the tests must have a certificate from the South Coast AQMD or from other training program approved by the District.	None	Same as in Rule 61.3.1. In addition, the pressure decay leak test of the vapor recovery system must be conducted pursuant to the District Test Procedure TP-96-1.
Recordkeeping	Requires records be maintained of inspections, repairs and maintenance performed and the results of initial and periodic compliance tests. The rule specifies minimum information to be included in repair logs and test records. In addition, gasoline throughput must be recorded monthly.	Requires monthly records of the VOC liquid throughput only for facilities that were in use prior to July 1978.	Same as in Rule 61.3.1.
Test Methods	Specifies test methods approved by the Environmental Protection Agency and CARB.	None	Same as in Rule 61.3.1.



**Table II - Comparative Analysis of Rule 61.4.1**

Items for Comparison	Rule 61.4.1	Rule 61.4	Best Available Control Technology (BACT)
Applicability	<p>Regulates transfer of gasoline into any motor vehicle fuel tank with a capacity greater than 5 gallons at the following facilities:</p> <ul style="list-style-type: none"> <li>• retail GDF's where gasoline is dispensed from stationary underground tanks with a capacity of 250 gallons or more; and</li> <li>• non-retail GDF's where gasoline is dispensed from stationary underground tanks with a capacity greater than 550 gallons and where no more than 2,000 gallons of gasoline is transferred per calendar month.</li> </ul>	<p>Regulates transfer of gasoline and other VOCs (as defined in Rule 61.0) from the following stationary underground storage tanks into any motor vehicle fuel tank with a capacity greater than 5 gallons.</p> <p>Applies to the same facilities as Rule 61.4.1.</p>	<p>New GDF with an annual gasoline throughput &gt;1 million gallons and any existing GDF proposing a throughput increase of one million per year or greater.</p>
Exemptions	<ul style="list-style-type: none"> <li>• Exempt from all rule requirements:               <ul style="list-style-type: none"> <li>- transfers from intermediate refuelers into motor vehicle fuel tanks</li> <li>- transfers into vehicles performing emergency work</li> <li>- transfers from stationary underground storage tanks used primarily in the fueling of aircraft and/or intermediate aircraft refuelers or boats</li> <li>- transfers from stationary underground storage tanks at non-retail GDFs where no more than 2,000 gallons are transferred during a calendar month.</li> </ul> </li> </ul>	<p>Same as in Rule 61.4.1.</p>	<p>Same as in Rule 61.4.1.</p>
Equipment and Operation Requirements	<ul style="list-style-type: none"> <li>• A person shall not supply, offer for sale, sell, install or allow the installation of any Phase II vapor recovery system unless the system and its components are CARB certified. All components must be clearly and permanently identified;</li> <li>• Phase II vapor recovery system must have a minimum 95% control efficiency and be compatible with the Phase I system;</li> <li>• The system must be installed, operated, and maintained in accordance with recent applicable CARB certification procedures and Executive Orders;</li> <li>• The system must be maintained free of Title 17 defects;</li> <li>• The system must be compatible with on-board refueling vapor recovery (ORVR);</li> </ul>	<ul style="list-style-type: none"> <li>• Each GDF must have a Phase II vapor recovery system with a minimum 95% control efficiency;</li> <li>• The system must be installed, operated, and maintained in accordance with CARB certification;</li> <li>• The system must be maintained free of Title 17 defects;</li> <li>• The dispensing nozzles must be equipped with a hold-open latch device.</li> </ul>	<p>Same as in Rule 61.4.1.</p>

Table II - Comparative Analysis of Rule 61.4.1 - Continued

Items for Comparison	Rule 61.4.1	Rule 61.4	Best Available Control Technology (BACT)
- Continued	<ul style="list-style-type: none"> <li>• Specifies minimum liquid removal rates for liquid removal devices;</li> <li>• Each gas station must post nozzle operating instructions and a warning sign that topping off is prohibited;</li> <li>• New or replacement dispensers must have on each side only one hose and one nozzle for dispensing gasoline. Applies to replacements only if more than 50% of dispensers are replaced;</li> <li>• The vapor recovery system and associated components except for components with an allowable leak rate must be maintained free of liquid and vapor leaks. Components with an allowable leak rate must operate within such rate;</li> <li>• Contractors and installers are required to complete a manufacturer's training program and any relevant program required by CARB or the District;</li> <li>• By specified dates, GDFs dispensing more than 600,000 gallons of gasoline per year must install a CARB certified In-Station Diagnostic system.</li> </ul>		
Inspection & Maintenance (I&M) Program	<p>An I&amp;M program must be implemented to ensure proper operation of the vapor recovery system. The program must be implemented by a facility representative and include, at a minimum, the following:</p> <ul style="list-style-type: none"> <li>• Periodic inspection of the system components. The frequency of periodic inspections is specified for retail and non-retail facilities;</li> <li>• A weekly liquid retention inspection of balance system coaxial hoses;</li> <li>• A monthly inspection of dispensing flow rates for each nozzle and each grade of gasoline;</li> <li>• An annual inspection to ensure compliance with all applicable District rules and regulations, all permit conditions, and all applicable CARB Executive Orders.</li> </ul> <p><u>Maintenance Procedures</u></p> <p>The I&amp;M program requires that components identified and recorded as not being in good condition be repaired, replaced, or adjusted within 7 calendar days. Use of any component having a Title 17 defect or a defect identified in the CARB Executive Order is prohibited.</p>	None	Same as in Rule 61.4.1

Table II - Comparative Analysis of Rule 61.4.1 - Continued

Items for Comparison	Rule 61.4.1	Rule 61.4	Best Available Control Technology (BACT)
Source Testing	Requires conducting an initial compliance test and subsequent periodic compliance tests (at least annually). A person conducting the tests must have a certificate from the South Coast AQMD or from other training program approved by the District.	None	Same as in Rule 61.4.1. In addition, the pressure decay leak test of the vapor recovery system must be conducted pursuant to the District Test Procedure TP-96-1.
Recordkeeping	Requires records be maintained of inspections, repairs and maintenance performed and the results of initial and periodic compliance tests. The rule specifies minimum information to be included in repair logs and test records. In addition, gasoline throughput must be recorded monthly.	None	Same as in Rule 61.4.1.
Test Methods	Specifies test methods approved by the Environmental Protection Agency and CARB.	None	Same as in Rule 61.4.1