

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### **RULE 461 - GASOLINE TRANSFER AND DISPENSING**

*(Adopted January 9, 1976)(Amended September 3, 1976; February 4, 1977; November 18, 1977; February 3, 1978; January 5, 1979; May 4, 1979; December 7, 1979; January 16, 1981; October 15, 1982; November 1, 1985; March 4, 1988; July 7, 1989; September 8, 1995; April 21, 2000; June 15, 2001; January 9, 2004; June 3, 2005)*

(a) **Applicability**

This rule applies to the transfer of gasoline from any tank truck, trailer, or railroad tank car into any stationary storage tank or mobile fueler, and from any stationary storage tank or mobile fueler into any mobile fueler or motor vehicle fuel tank.

(b) **Definitions**

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

- (1) **ALTERED FACILITY** is a Gasoline Transfer and Dispensing Facility with any of the following:
  - (A) The removal or addition of storage tank(s), or changes in the number of fueling positions.
  - (B) The replacement of storage tank(s), dispensing nozzle(s) or other equipment with different characteristics or descriptions from those specified on the existing permit.
- (2) **BACKFILLING** is the covering of the underground storage tank, piping or any associated components with soil, aggregate or other materials prior to laying the finished surface.
- (3) **BELLOWS-LESS NOZZLE** is any nozzle that incorporates an aspirator or vacuum assist system and a gasoline vapor capture mechanism at the motor vehicle filler neck, such that vapors are collected at the vehicle filler neck without the need for an interfacing flexible bellows.
- (4) **BREAKAWAY COUPLING** is a component attached to the coaxial hose, which allows the safe separation of the hose from the dispenser or the hose from the nozzle in the event of a forced removal such as in the case of a “drive-off.”
- (5) **CARB CERTIFIED** or certified by CARB means a Phase I or Phase II vapor recovery system, equipment, or any component thereof, for which the California Air Resources Board (CARB) has evaluated its performance

and issued a valid Executive Order pursuant to Health and Safety Code Section 41954. Each component of a system is a separate CARB certified item and cannot be replaced with a non-certified item or other items that are not certified for use with the particular system. Except for qualified repairs, a CARB certified component shall be as supplied by the qualified manufacturer. A rebuilt component shall not be deemed as CARB certified unless the person who rebuilds the component is authorized by CARB to rebuild the designated CARB certified component.

- (6) CLEARLY AND PERMANENTLY MARKED means an identification of the qualified manufacturer's name, model number, and other required information on a vapor recovery system component that is legible, and the identification is either directly stamped on or attached to the component using methods or materials that would endure constant long term use.
- (7) COAXIAL FILL TUBE is a submerged fill tube that contains two passages one within the other. The center passage transfers gasoline liquid to the storage tank and the outer passage carries the gasoline vapors to the tank truck, trailer or railroad tank car.
- (8) COAXIAL HOSE is a hose that contains two passages one within the other. One of the passages dispenses the liquid gasoline into the vehicle fuel tank while the other passage carries the gasoline vapors from the vehicle fuel tank to the storage tank.
- (9) DISPENSER is a gasoline dispensing unit used for housing the aboveground gasoline and vapor recovery piping, the gasoline meters, and to hang gasoline-dispensing nozzles when they are not in use for fueling.
- (10) DRY BREAK or poppetted dry break is a Phase I vapor recovery component that opens only by connection to a mating device to ensure that no gasoline vapors escape from the underground storage tank before the vapor return line is connected and sealed.
- (11) DUAL-POINT DESIGN is a type of Phase I vapor recovery system that delivers gasoline liquid into storage tanks and recovers the displaced vapors through two separate openings on the tank.
- (12) ENHANCED VAPOR RECOVERY (EVR) means performance standards and specifications set forth in the CARB CP 201 (Certification Procedure for Vapor Recovery Systems at gasoline dispensing facilities) Sections 3 through 8 and 10 inclusively, with exception of the requirement for

compatibility with vehicles equipped with On-Board Refueling Vapor Recovery (ORVR) systems as specified in Subsection 4.1, 4.4 and 13.4.1.

- (13) FUELING POSITION is a fuel dispensing unit consisting of nozzle(s) and meter(s) with the capability to deliver only one fuel product at one time.
- (14) GASOLINE is any petroleum distillate or petroleum distillate/alcohol blend having a True Vapor Pressure greater than 200 mm Hg (3.9 psi) and less than 760 mm Hg (14.7 psi) at 100 degrees F as determined by ASTM Method D323-89.
- (15) GASOLINE TRANSFER AND DISPENSING FACILITY is a mobile system or a stationary facility, consisting of one or more storage tanks and associated equipment, which receive, store, and dispense gasoline.
- (16) GASOLINE VAPORS are the organic compounds in vapor form displaced during gasoline transfer and dispensing operations, and includes entrained liquid gasoline.
- (17) INSERTION INTERLOCK MECHANISM is any CARB certified mechanism that ensures a tight fit at the nozzle fill pipe interface and prohibits the dispensing of gasoline unless the bellows is compressed.
- (18) INSTALLER/CONTRACTOR is a person(s) engaged in the installation of new or alterations of existing vapor recovery systems and components at a gasoline dispensing facility.
- (19) LIQUID REMOVAL DEVICE is a device designed specifically to remove trapped liquid from the vapor passages of a coaxial hose.
- (20) LIQUID TIGHT is a liquid leak rate not exceeding three drops per minute.
- (21) MAJOR DEFECT is a defect in the vapor recovery system or its component, as listed in California Code of Regulations, Title 17, Part III, Chapter 1, Subchapter 8, Section 94006.
- (22) MINOR DEFECT is a defect in any gasoline transfer and dispensing equipment, which renders the equipment out of good working order but which does not constitute a major defect.
- (23) MOBILE FUELER is any tank truck or trailer that is used to transport and dispense gasoline from an onboard storage tank into any motor vehicle fuel tank.
- (24) MOTOR VEHICLE is any self-propelled vehicle as defined in Section 415 of the California Vehicle Code.
- (25) OWNER/OPERATOR is any person who owns, leases, or operates a gasoline transfer and dispensing facility.

- (26) PERFORMANCE TEST is the first test or series of tests performed on a new or altered CARB certified gasoline vapor recovery system to demonstrate compliance with the CARB Executive Order and District permit conditions upon completion of construction or alteration of the vapor recovery system.
- (27) PRESSURE/VACUUM RELIEF VALVE is 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 or vacuum.
- (28) QUALIFIED MANUFACTURER is the original equipment manufacturer of the CARB certified vapor recovery system or component, or a rebuilder who is authorized by CARB to rebuild the designated CARB certified component.
- (29) QUALIFIED REPAIR is a repair or maintenance of the gasoline transfer and dispensing equipment or vapor recovery system component that would restore the function or performance of such equipment/component following the qualified manufacturer's instructions and using only the applicable CARB certified parts supplied by the qualified manufacturer. Unless otherwise authorized by CARB, a repair or maintenance shall not be considered a qualified repair if the action changes the size, shape or materials of construction of any gasoline vapor passage, or if it may otherwise obstruct, hinder, or reduce the recovery of gasoline vapors during operation.
- (30) REBUILD is an action that repairs, replaces, or reconstructs any part of a component of a vapor recovery system that forms the gasoline vapor passage of the component, or that comes in contact with the recovered gasoline vapors in the component. Rebuild does not include the replacement of a complete component with another CARB certified complete component; nor does it include the replacement of a spout, bellows, or vapor guard of a CARB certified nozzle. The new part shall be CARB certified and as supplied by the qualified manufacturer specifically for the CARB certified nozzle.
- (31) RETAIL GASOLINE TRANSFER AND DISPENSING FACILITY is any gasoline transfer and dispensing facility subject to the payment of California sales tax for the sale of gasoline to the public.
- (32) RE-VERIFICATION TEST is a test or series of tests performed subsequent to the performance test on a CARB certified gasoline vapor

recovery system to demonstrate compliance with the CARB Executive Order and District permit conditions.

- (33) SPILL BOX is an enclosed container around a Phase I fill pipe that is designed to collect gasoline spillage resulting from disconnection between the liquid gasoline delivery hose and the fill pipe.
- (34) SUBMERGED FILL TUBE is any storage tank fill tube with the highest level of the discharge opening entirely submerged, when the liquid level above the bottom of the tank is:
  - (A) 15.2 cm (6 inches), for tanks filled from the top, or
  - (B) 45.7 cm (18 inches) for tanks filled from the side.
- (35) VAPOR CHECK VALVE is a valve that opens and closes the vapor passage to the storage tank to prevent gasoline vapors from escaping when the nozzle is not in use.
- (36) VAPOR RECOVERY SYSTEM is a system installed at a gasoline transfer and dispensing facility for collection and recovery of gasoline vapors displaced or emitted from the stationary storage tanks or mobile fuelers (Phase I) and during refueling of vehicle fuel tanks (Phase II). A Phase II vapor recovery system may be a balance system, which operates on the principle of vapor displacement, a vacuum-assist system, which uses a mechanical vacuum-producing device to create a vacuum, or an aspirator-assist system, which uses an aspirator or eductor to create a vacuum during gasoline dispensing to capture gasoline vapors.
- (37) VAPOR TIGHT means the detection of less than 10,000 ppm hydrocarbon concentration, as determined by EPA Method 21, using an appropriate analyzer calibrated with methane.

(c) Equipment and Operation Requirements

- (1) Gasoline Transfer into Stationary Storage Tanks and Mobile Fuelers (Phase I)

A person shall not transfer, allow the transfer or provide equipment for the transfer of gasoline from any tank truck, trailer into any stationary storage tank with a capacity of 950 liters (251 gallons) or more, or any mobile fueller tank of greater than 454 liters (120 gallons) capacity unless all of the following conditions are met:

- (A) Such stationary storage tank or mobile fueller tank is equipped with a "CARB certified" submerged fill tube.

- (B) Such stationary storage tank or mobile fueler tank is equipped with a "CARB certified" vapor recovery system as capable of recovering or processing displaced gasoline vapors by at least 95%, or having a minimum volumetric efficiency of 98% and an emission factor not exceeding 0.15 pounds per 1,000 gallons, as applicable. The vapor recovery system shall be maintained and operated according to the manufacturer's specifications and the applicable CARB Executive Orders. By June 30, 2006, prior to installing or altering Phase I Enhanced Vapor Recovery systems and associated components an installer/contractor shall have successfully completed a manufacturer training program applicable to the system they are installing or altering and any relevant state certification program required for the installation and alteration of the vapor recovery system.
- (C) All vapor return lines are connected between the tank truck, trailer or railroad tank car, and the stationary storage tank or mobile fueler. In addition, all associated hoses, fittings, and couplings are maintained in a liquid-tight and vapor-tight condition, as defined under subdivision (b).
- (D) The hatch on any tank truck, trailer, or mobile fueler shall be equipped with a vapor tight cover during gasoline transfer and pumping. The hatch shall not be opened except for visual inspection, which may be performed after at least three minutes following the completion of the gasoline transfer or pumping. Except otherwise specified by CARB, visual inspection shall be completed in three minutes or less.
- (E) The fuel delivery lines shall be maintained liquid tight, vapor tight, and free of air ingestion. A fuel delivery that is free of air ingestion is determined by observing the fuel stream as clear and free of air bubbles through the sight windows on the delivery system, except during the initial and final 60 seconds of fuel transferring.
- (F) The following equipment shall be installed, operated and maintained as specified below:
  - (i) All fill tubes are equipped with vapor tight caps;

- (ii) All dry breaks are equipped with vapor tight seals and vapor tight caps;
  - (iii) All CARB certified coaxial fill tubes are spring-loaded and operated so that the vapor passage from the stationary storage tank or the mobile fueler back to the tank truck, trailer is not obstructed;
  - (iv) The fill tube assembly, including fill tube, fittings and gaskets, is maintained to prevent vapor leakage from any portion of the vapor recovery system;
  - (v) All stationary storage tank or mobile fueler vapor return lines without dry breaks are equipped with vapor tight caps;
  - (vi) Each vapor tight cap is in a closed position except when the fill tube or dry break it serves is actively in use; and
  - (vii) Each gasoline delivery elbow is equipped with sight windows.
- (G) Any time after September 8, 1995, when an underground stationary storage tank is installed or replaced at any gasoline transfer and dispensing facility, a "CARB certified" spill box shall be installed. The spill box shall be maintained free of standing liquid, debris and other foreign matters, and equipped with an integral drain valve or other devices that are certified by CARB to return spilled gasoline to the underground stationary storage tank. The drain valve shall be maintained closed and free of vapor emissions at all times except when the valve is actively in use.
- (H) Except when otherwise specified in the applicable CARB Executive Orders, the Phase I vapor recovery system shall be of dual-point design and equipped with "CARB certified" poppetted dry breaks or spring-loaded vapor check valves on the vapor return coupler.
- (2) Gasoline Transfer into Vehicle Fuel Tanks (Phase II)
- A person shall not transfer, or allow the transfer, or provide equipment for the transfer of gasoline from a stationary storage tank or a mobile fueler of greater than 454 liters (120 gallons) capacity into any mobile fueler of greater than 454 liters (120 gallons) capacity or any motor vehicle fuel tank of greater than 19 liters (5 gallons) capacity unless all of the following conditions are met:

- (A) The dispensing unit used to transfer the gasoline from the stationary storage tank or mobile fueler to the mobile fueler or motor vehicle fuel tank is equipped with a "CARB certified" vapor recovery system as capable of recovering or processing displaced gasoline vapors by at least 95%, or having an emission factor not exceeding 0.38 pounds per 1,000 gallons, as applicable.
- (B) The vapor recovery system and associated components are operated and maintained in a manner in accordance with the manufacturer's specifications and the applicable CARB certification. By June 30, 2006, prior to installing or altering Phase II Enhanced Vapor Recovery systems and associated components an installer/contractor shall have successfully completed a manufacturer training program applicable to the system they are installing or altering and any relevant state certification program required for the installation and alteration of the vapor recovery system. The system and associated components shall be maintained vapor tight and liquid tight at all times.
- (C) Equipment subject to this rule is operated and maintained with no major defect.
- (D) Each balance-system nozzle is equipped with a "CARB certified" insertion interlock mechanism and a CARB certified vapor check valve which shall be located in the nozzle.
- (E) Each gasoline-dispensing nozzle is equipped with a CARB certified coaxial hose.
- (F) Unless otherwise specified in the applicable CARB Executive Orders, all liquid removal devices installed for any gasoline-dispensing nozzle with a dispensing rate of greater than five gallons per minute shall be "CARB certified" with a minimum liquid removal rate of five milliliters per gallon transferred.
- (G) The breakaway coupling shall be CARB certified. Any breakaway coupling that is installed after April 21, 2000, shall be equipped with a poppet valve, which shall close and maintain both the gasoline vapor and liquid lines vapor tight and liquid tight when the coupling is separated. In the event of a separation due to a "drive-off", the owner/operator shall complete one of the following



and document the activities pursuant to paragraph (e)(7) recordkeeping requirements:

- (i) Conduct a visual inspection of the affected equipment and perform qualified repairs on any damaged components before placing any affected equipment back in service. In addition, the applicable reverification tests pursuant to subparagraph (e)(2)(A), or equivalent test methods as approved in writing by the Executive Officer and CARB, shall be conducted and successfully passed within 24 hours after the affected equipment is placed back in service; or
- (ii) Conduct a visual inspection of the affected equipment and replace the affected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or certified rebuilt components that are CARB certified, before placing any affected equipment back in service.

(3) Additional Requirements

- (A) A person shall not supply, offer for sale, sell, install or allow the installation of any vapor recovery system or any of its components, unless the system and component are CARB certified. Each vapor recovery system and its components shall be clearly and permanently marked with the qualified manufacturer's name and model number as certified by CARB. In addition, the qualified manufacturer's unique serial number for each component shall also be clearly and permanently marked for the dispensing nozzles. Any qualified manufacturer who rebuilds a component shall also clearly and permanently mark the corresponding information on the component.
- (B) For a breakdown (as defined in Rules 102 and 430) of a central vapor incineration or processing unit, the provisions of Rule 430 shall apply. "End of Cycle" as that term is used in Rule 430 shall be deemed to mean the completion of fueling by the last customer who was fueling at the time of the breakdown for the application of Rule 430 in subparagraph (c)(3)(B).
- (C) A person shall not perform or allow the "pump-out" (bulk transfer) of gasoline from a storage tank subject to paragraph (c)(1) unless such bulk transfer is performed using a vapor collection and

transfer system capable of returning the displaced vapors to the stationary storage tank.

- (D) A person shall not store, or allow the storage of, gasoline in any stationary storage tank with a capacity of 950 liters (251 gallons) or more, or any mobile fueler with a capacity of 454 liters (120 gallons) or more, unless such tank complies with Rule 463 or complies with the following:
  - (i) The tank is equipped with a Phase I vapor recovery system; and
  - (ii) The tank is operated and maintained with an integral vapor-tight drain valve to return spilled gasoline to the storage tank, if the tank is equipped with a spill container except for mobile fuelers.
- (E) The owner/operator shall conspicuously post the District-required signs specified in Attachment A of this rule in the immediate gasoline dispensing area.
- (F) For a dispenser that is not intended to be used to fuel motor vehicles, the owner/operator shall have a sign posted on it to that effect.
- (G) A person shall not store, or allow the storage of, gasoline in any stationary storage tank with a capacity of 950 liters (251 gallons) or more, or any mobile fueler with a capacity of 454 liters (120 gallons) or more, unless the vent pipe of the tank complies with all of the following:
  - (i) The vent pipe opening is equipped with a "CARB certified" pressure-vacuum relief valve.
  - (ii) The vent pipe opening for a stationary storage tank is at least 12 feet above the driveway level used for tank truck filling operations.
  - (iii) Unless otherwise specified in the applicable CARB Executive Orders, the pressure-vacuum relief valve for an underground storage tank vent shall be set for pressure relief at 3 plus or minus 0.5 inches water column and vacuum relief at 8 plus or minus 2 inches water column. The valves for vents on aboveground tanks and mobile

fuelers shall meet the applicable CARB certified specifications.

- (iv) Effective January 1, 2002, pressure-vacuum relief valves for stationary storage tanks, as supplied and installed, shall be color-coded or otherwise clearly marked to identify the pressure-vacuum setting. The color codes or marks shall be legible to ground-level observers.
- (v) For the purpose of this requirement, vent pipes of gasoline storage tanks may be manifolded to a single valve when the stationary storage tanks are manifolded according to the applicable CARB Executive Order.
- (H) A person shall not store gasoline in open container(s) of any size or handle gasoline in any manner (spillage, spraying, etc.) that allows gasoline liquid or gasoline vapors to enter the atmosphere, contaminate the ground, or the sewer.
- (I) The failure of an owner/operator to meet any requirements of subdivision (c) of this rule shall constitute a violation. Such non-compliant equipment shall be tagged "Out of Order".
- (J) Except during active repair activity, the "Out of Order" tag specified in subparagraph (c)(3)(I) shall not be removed and the non-compliant equipment shall not be used, allowed to be used, or provided for use unless all of the following conditions are satisfied:
  - (i) The non-compliant equipment has been repaired, replaced, or adjusted, as necessary;
  - (ii) The non-compliant equipment has been reinspected and/or authorized for use by the Executive Officer or his designee.
- (K) The owner/operator shall repair or replace any vapor recovery component having minor defects within seven days, pursuant to Section 41960.2(e) of the California Health and Safety Codes.
- (L) The owner/operator and/or the installer/contractor shall have all underground storage tank installations and associated piping configuration inspected by the Executive Officer or his designee prior to backfilling, to verify that all underground equipment is properly installed in accordance with the requirements specified in the applicable CARB Executive Order. The owner/operator and/or installer/contractor shall notify the District by telephone or other

District-approved method and obtain a confirmation number at least three days (at least one of the days shall be regular District business days) prior to the backfilling.

- (M) No later than November 1, 2000, the owner/operator of a retail gasoline transfer and dispensing facility and by June 30, 2006, at a non-retail gasoline transfer and dispensing facility, shall implement a maintenance program and document the program in an operation and maintenance (O&M) manual for the vapor recovery system. The O&M manual shall be kept at the facility and made available to any person who operates, inspects, maintains, repairs, or tests the equipment at the facility as well as the District personnel upon request. The O&M manual shall contain detailed instructions that ensure proper operation and maintenance of the vapor recovery system and its components in compliance with all applicable rules and regulations. The O&M manual shall reference all manufacturer required maintenance cycles as delineated in the Executive Order that certified the system. The manual shall, at a minimum, include the following current information:
- (i) All applicable CARB Executive Orders, Approval Letters, and District Permits.
  - (ii) The manufacturer's specifications and instructions for installation, operation, repair and maintenance required pursuant to CARB Certification Procedure CP-201, and any additional instructions provided by the manufacturer.
  - (iii) System and/or component testing requirements, including test schedules and passing criteria for each of the standard tests listed under subdivision (f). The owner/operator may include any non-CARB required diagnostic and other tests as part of the testing requirements.
  - (iv) Additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, CARB Executive Orders and District permit conditions, including replacement schedules for failure or wear prone components.

(d) Self-Compliance Program Requirements

The owner/operator of any retail gasoline transfer and dispensing facility shall implement a District-approved self-compliance program as follows:

- (1) The self-compliance program shall include the following elements:
  - (A) Daily maintenance inspections shall be conducted in accordance with the protocol specified in Attachment B to ensure proper operating conditions of all components of the vapor recovery systems.
  - (B) Periodic compliance inspections shall be conducted at least once every twelve months and in accordance with the protocol specified in Attachment C to verify the compliance with all applicable District rules and regulations, as well as all permit conditions.
- (2) Any equipment with major defect(s) which are identified during the daily maintenance inspections or periodic compliance inspections shall be removed from service, repaired, brought into compliance, and duly entered into the repair logs required under paragraph (e)(7) before being returned to service.
- (3) Defects discovered during self inspection and repaired shall not constitute a violation of Rule 461.
- (4) Any new self-compliance program or revisions to the existing self-compliance program as specified in paragraph (d)(1) shall be submitted in writing to the District for prior approval before implementation.
- (5) Training and Certification
  - (A) A person shall not conduct daily maintenance inspections specified in subparagraph (d)(1)(A) or do required recordkeeping unless such person has completed an appropriate District-approved training program.
  - (B) A person shall not conduct periodic compliance inspections specified in subparagraph (d)(1)(B) or do required recordkeeping unless such person has completed an appropriate District-approved training program in the inspection and maintenance of vapor recovery systems and has received a certification issued by the District.

(e) Testing, Reporting and Recordkeeping Requirements

- (1) Within 30 calendar days after the initial operation of a new or altered gasoline transfer and dispensing facility, the owner/operator shall conduct and successfully pass the performance tests required by the applicable CARB Executive Orders and District Permits, in accordance with the test methods specified in sub-division (f) to verify the proper installation and operation of Phase I and Phase II vapor recovery systems. Test results shall be submitted as stated in subparagraphs (e)(3)(D) and (E).
- (2) The owner/operator shall conduct and successfully pass the applicable reverification tests in accordance with the test methods specified in subdivision (f) to verify the proper operation of the vapor recovery system as follows:
  - (A) Except as specified in the applicable CARB Executive Orders, the reverification tests shall include the following as applicable:
    - (i) Static pressure (leak decay) test (Phase I and Phase II systems).
    - (ii) Air-to-liquid (A/L) ratio test (facility with bellows-less nozzles).
    - (iii) Dynamic pressure (back-pressure) test (facility with a balance system).
    - (iv) Liquid removal test (systems with a liquid removal device required by CARB Executive Orders).
    - (v) The static torque of rotatable adaptors test.
    - (vi) The leak rate of the drop tube/drain valve assembly test.
    - (vii) The leak rate of the drop tube overfill protection device and spill container drain valve test.
    - (viii) The leak rate and cracking pressure of pressure/vacuum vent valves test (as required by CARB Executive Orders).
    - (iv) Any other test required by the applicable CARB Executive Orders.
  - (B) The reverification tests at retail gasoline transfer and dispensing facilities shall be conducted no less frequently than as scheduled below, based on the facility's maximum monthly gasoline throughput during the 12-month period immediately preceding the required test:

- (i) The owner/operator of a facility with a maximum monthly throughput of 100,000 gallons or greater shall complete the reverification tests initially no later than November 1, 2000, and semiannually thereafter. Each semiannual test shall be completed within six months of the previous successful test.
    - (ii) The owner/operator of a facility with a maximum monthly throughput less than 100,000 gallons shall complete the reverification tests initially no later than May 1, 2001, and annually thereafter. Each annual test shall be completed within 12 months of the previous successful test.
  - (C) The owner/operator of a non-retail gasoline transfer and dispensing facility shall complete the reverification tests initially no later than May 1, 2001, and annually thereafter. Each annual test shall be completed within 12 months of the previous successful test.
- (3) A person who conducts performance or reverification tests shall comply with all of the following:
  - (A) Conduct performance or reverification tests in accordance with the applicable test methods listed in subdivision (f) and other CARB testing procedures. Tests shall be conducted using calibrated equipment meeting the calibration range and calibration intervals specified by the manufacturer.
  - (B) Notify the District by telephone or other District approved methods and obtain a confirmation number at least three days prior to testing (at least one of the days shall be regular District business days), except as specified in paragraph (e)(4). Notwithstanding, the three-day notice may not be required for reverification tests conducted after a drive-off pursuant to clause (c)(2)(G)(i), provided that the person conducting the tests complies with all other applicable provisions of the rule.
  - (C) Conduct performance and reverification tests between the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday. Notwithstanding, the Executive Officer may approve testing on a weekend day (Saturday or Sunday) based on the following criteria:
    - (i) The District shall approve a limited number of reverification testing requests per weekend on a first-come-

first-served basis. These reverification tests are subject to the following restrictions:

- (I) The person conducting the tests has notified the District pursuant to subparagraph (e)(3)(B) for reverification tests. The requests shall be made no more than 30 calendar days in advance of the testing.
  - (II) Tests shall be conducted from 7:00 a.m. through 5:30 p.m.
  - (III) Upon request by the Executive Officer, the person who conducted the tests on a weekend day for which the District staff was not present shall repeat the reverification testing at a mutually acceptable date but no later than 10 calendar days from the day the test was conducted. The GDF shall pay the cost of the repeat reverification testing.
- (ii) The District shall approve all requests for a retest on a weekend day provided that the retest meets the following conditions:
- (I) The retest on a weekend day is necessary as the repairs and retest following a failed reverification test cannot be completed by Friday.
  - (II) The person conducting the test has notified the District pursuant to subparagraph (e)(4)(A) or left a phone notification before midnight of the day before the retest.
  - (III) Tests shall be conducted from 7:00 a.m. through 5:30 p.m.
  - (IV) Upon request by the Executive Officer, the person who conducted the test on a weekend day for which the District staff was not present shall repeat the reverification testing at a mutually acceptable date but no later than 10 calendar days from the day the test was conducted. The GDF shall pay the cost of the repeat reverification testing.



- (D) Submit a copy of the PASS/FAIL test results electronically in a District approved format to the Executive Officer within 72 hours after each test is conducted. The PASS/FAIL test results are a summary of the overall results of each test.
  - (E) Submit the final test report demonstrating compliance within 14 calendar days of the date when all tests were passed. The test report shall include all the required records of all tests performed, test data, current AQMD facility ID number of the location being tested, the equipment Permit to Operate or Application number, the AQMD ID number of the company performing the tests, a statement whether the system or component tested meets the required standards, and the name and signature of the person responsible for conducting the tests. The person responsible for conducting the tests shall have completed the District's orientation class for testing and any subsequent refresher class or state certification program as required.
- (4) Notwithstanding subparagraph (e)(3)(B), the owner/operator of a gasoline transfer and dispensing facility that has failed a reverification test or portions thereof may retest the facility prior to resuming operation provided that the person conducting the tests has complied with one of the following:
- (A) Notify the District by telephone or other District approved methods and obtain a confirmation number at least 12 hours prior to retesting (at least six of the hours shall be regular District business hours); or
  - (B) When all necessary repairs are performed during the same day the facility has failed any of the applicable reverification tests, the owner/operator may retest the facility on the same day without re-notification, provided that the reasons for the test failure and any repairs performed are properly documented in the test reports and the repair logs pursuant to subparagraphs (e)(7)(B) and (e)(7)(C).
- (5) The owner/operator shall not operate or resume operation of a gasoline transfer and dispensing facility, unless the facility has successfully passed the applicable performance or reverification tests. Notwithstanding the above, when a dispenser associated with any equipment that has failed a reverification test is isolated and shut down, the owner/operator may

continue operation or resume operation of the remaining equipment at the facility, provided that test results demonstrate that the remaining equipment is in good operating condition. All test results and the method of isolating the defective equipment shall be documented in the test reports to be submitted to the Executive Officer pursuant to subparagraphs (e)(7)(C), (e)(3)(D) and (e)(3)(E).

- (6) The owner/operator shall submit the facility's monthly gasoline throughput data to the Executive Officer in conjunction with the reverification test report for each testing and reporting period, except when otherwise approved in writing by the Executive Officer.

(7) Recordkeeping

A person who performs the installation of components, self-compliance inspections, repairs or testing at any gasoline transfer and dispensing facility, including, but not limited to, the activities for normal operation and maintenance, performance testing, reverification testing and those following a drive-off, shall provide to the owner/operator all records listed below, as applicable, at the end of each day when the service is provided. The owner/operator of any retail or non-retail gasoline dispensing facility shall maintain all records listed below and any other test results or maintenance records that are required to demonstrate compliance on site for a period of at least two years (or five years for Title V facilities). Notwithstanding, records for non-retail gasoline dispensing facilities that are unmanned may be kept at other locations approved by the Executive Officer. All records shall be made available to the District personnel upon request both on site during inspections and offsite as specified.

- (A) Records of all components installed, defective components identified or repaired during self-compliance inspections.

(B) Repair logs, which shall include:

- (i) Date and time of each repair.
- (ii) The name of the person(s) who performed the repair, and, if applicable, the name, address and phone number of the person's employer.
- (iii) Description of service performed.
- (iv) Each component that was installed, repaired, serviced, or removed, including the required component identification information pursuant to subparagraph (c)(3)(A).

- (v) Each component that was installed as replacement, if applicable, including the required component identification information pursuant to subparagraph (c)(3)(A).
  - (vi) Receipts for parts used in the repair and, if applicable, work orders, which shall include the name and signature of the person responsible for performing the repairs.
- (C) Records of tests, which shall include:
- (i) Date and time of each test.
  - (ii) District confirmation number of notifications.
  - (iii) Name, affiliation, address and phone number of the person(s) who performed the test.
  - (iv) Test data and calibration data for all equipment used.
  - (v) Date and time each test is completed and the facility owner/operator is notified of the results. For a test that fails, a description of the reasons for the test failure shall also be included.
  - (vi) For a retest following a failed performance or reverification test, description of repairs performed pursuant to subparagraph (e)(4)(B).
  - (vii) Copies of test reports in District approved format.
- (D) Monthly gasoline throughput records.
- (E) Records to prove that the installer/contractor that installed or altered the Enhanced Vapor Recovery equipment has successfully completed a manufacturer training program applicable to the Phase I Enhanced Vapor Recovery systems and associated components as specified in subparagraph (c)(1)(B) and applicable to the Phase II Enhanced Vapor Recovery systems and associated components as specified in subparagraph (c)(2)(B).

(f) Test Methods

The performance and reverification tests shall be conducted in accordance with the following test methods. All test methods referenced in this subdivision shall be the most recently CARB approved version or as stated in the applicable CARB Executive Orders.

- (1) The static pressure performance of a Phase I or Phase II vapor recovery system for underground and aboveground tanks shall be determined by the CARB Test Procedure TP-201.3 and TP-201.3B, as applicable.

- (2) The dynamic pressure performance of a Phase II vapor recovery system shall be determined by the CARB Test Procedure TP-201.4.
- (3) The air-to-liquid volume ratio of a Phase II vapor recovery system shall be determined by the CARB Test Procedure TP-201.5.
- (4) The liquid removal rate of a Phase II vapor recovery system shall be determined by the CARB Test Procedure TP-201.6.
- (5) The manifold of the underground storage tanks shall meet CARB tank tie test requirements pursuant to TP-201.3C.
- (6) The static torque of rotatable adaptors for a Phase I Enhanced Vapor Recovery system shall be determined by the CARB Test Procedure TP-201.1B.
- (7) The leak rate of the drop tube/drain valve assembly for a Phase I Enhanced Vapor Recovery system shall be determined by the CARB Test Procedure TP-201.1C.
- (8) The leak rate of the drop tube overflow protection device and spill container drain valve for a Phase I Enhanced Vapor Recovery system shall be determined by the CARB Test Procedure TP-201.1D.
- (9) The leak rate and cracking pressure of pressure/vacuum vent valves for a Phase I Enhanced Vapor Recovery system shall be determined by the CARB Test Procedure TP-201.1E.
- (10) Any other test methods approved by the USEPA, CARB, and the District for underground tanks, aboveground tanks, and mobile fuelers.

(g) Exemptions

- (1) The provisions of this rule shall not apply to the following:
  - (A) Transfer of gasoline into or from any stationary storage tank or mobile fueler if 75 percent or more of its monthly throughput is used for the fueling of implements of husbandry, such as vehicles defined in Division 16 (Section 36000, et seq.) of the California Vehicle Code, provided such a tank is equipped with a submerged fill tube. This exemption shall remain in effect until July 1, 2007. On or after that date gasoline transfer and dispensing equipment subject to the requirements of this rule shall operate only after receipt of a valid Permit to Construct or Permit to Operate.
  - (B) Transfer of gasoline into or from any stationary storage tank or mobile fueler used exclusively for fueling agricultural wind

machines. This exemption shall remain in effect until July 1, 2007. On or after that date gasoline transfer and dispensing equipment subject to the requirements of this rule shall operate only after receipt of a valid Permit to Construct or Permit to Operate.

(C) Transfer of gasoline into testing equipment used to verify the efficiency of the vapor recovery system by CARB or the District or testing contractors, the accuracy of the gasoline dispensing equipment by the Department of Weight and Measures, and the fire safety standards by the Fire Department.

(2) The requirements of paragraph (c)(2) shall not apply to the fueling of Tournament of Roses parade floats.

(h) Rule 1402 Inventory Requirements

A retail gasoline transfer and dispensing facility that is in compliance with all applicable provisions of this rule, CARB Executive Orders, and District permit conditions shall not be required to submit an emission inventory to the Executive Officer, pursuant to subparagraph (n)(1)(B) of Rule 1402 - Control of Toxic Air Contaminants from Existing Sources, and is deemed in compliance with the requirements of Rule 1402, unless the facility exceeds the significant risk level as defined in Rule 1402.

## ATTACHMENT A

### AQMD-REQUIRED SIGNS

- I. The operator shall post nozzle operating instructions and the following signs:
- (A) SCAQMD toll-free telephone number: "If you have nozzle problems, please call the Air Quality Management District at the toll-free number (800) 242-4020;" or equivalent information approved in writing by the Executive Officer; and
  - (B) A "warning" stating:

**"TOXIC RISK - FOR YOUR OWN PROTECTION  
DO NOT BREATHE FUMES  
DO NOT TOP TANKS"**

- II. All required signs shall conform to all of the following:
- (A) For decal signs:
    - (i) Each sign shall be visible from all fueling positions it serves; and
    - (ii) Sign shall be readable from a distance of 3 feet.
  - (B) All other signs:
    - (i) For pump toppers, one double-back sign per island;
    - (ii) For permanent (non-decal) signs, two single-sided or one double-sided sign(s) per two (2) dispensers.
    - (iii) All signs shall be readable from a distance of 6 feet.

## **ATTACHMENT B**

### **DAILY MAINTENANCE INSPECTION PROTOCOL**

The owner/operator of a retail gasoline transfer and dispensing facility shall at minimum verify the following during the daily maintenance inspections:

**(A) PHASE I VAPOR RECOVERY SYSTEM INSPECTION**

1. The spill container is clean and does not contain gasoline. The spill containment drain valve shall be vapor-tight.
2. The fill caps are not missing, damaged or loose.
3. If applicable:
  - a. the spring-loaded submerged fill tube seals properly against the coaxial fitting
  - b. the dry break (poppet valve) is not missing or damaged.
4. The submerged fill tube is not missing or damaged.

**(B) PHASE II VAPOR RECOVERY SYSTEM INSPECTION**

1. The fueling instructions are clearly displayed with the appropriate toll-free complaint phone number and toxic warning signs.
2. The following nozzle components are in place and in good condition, as specified in CARB Executive Orders:
  - a. faceplate/facecone; vapor splash guard/fill guard/efficiency compliance device (ECD)/VEG
  - b. bellows
  - c. latching device spring
  - d. vapor check valve
  - e. spout (proper diameter/vapor collection holes)
  - f. insertion interlock mechanism
  - g. automatic shut-off mechanism
  - h. hold open latch
3. The hoses are not torn, flattened or crimped.
4. For vacuum-assist systems, the vapor processing unit and burner are functioning properly.

**(C) RECORDS OF DEFECTIVE COMPONENTS**

## **ATTACHMENT C**

### **PERIODIC COMPLIANCE INSPECTION PROTOCOL**

The owner/operator of a retail gasoline transfer and dispensing facility shall at minimum verify the following during the periodic compliance inspections:

#### **(A) GENERAL INSPECTION**

1. The District permit is current.
2. The equipment and District permit description match.
3. The facility complies with all permit conditions.
4. The required sign is properly posted and the sign contains all the necessary information. (i.e., toll-free complaint phone number, toxic warning sign, etc.)

#### **(B) PHASE I VAPOR RECOVERY SYSTEM INSPECTION**

1. The spill container is clean and does not contain gasoline.
2. The fill caps are not missing, damaged or loose.
3. If applicable:
  - a. the spring-loaded submerged fill tube seals properly against the coaxial fitting
  - b. the dry break (poppet valve) is not missing or damaged.
4. The submerged fill tube is not missing or damaged.
5. The distance between the highest level of the discharge opening of the submerged fill tube and the bottom of the stationary storage tank does not exceed six inches (6").
6. The Phase I vapor recovery system complies with required CARB certification and is properly installed.
7. The spill box complies with required CARB certification and is properly installed.
8. The vent pipes are equipped with required pressure/vacuum relief valves.

#### **(C) PHASE II VAPOR RECOVERY SYSTEM INSPECTION**

1. The fueling instructions are clearly displayed.
2. Each nozzle is the current CARB-certified model.



## ATTACHMENT C - CONTINUED

3. Each nozzle is installed in accordance with the applicable CARB Executive Orders.
4. The following nozzle components are in place and in good condition, as specified in CARB Executive Orders or California Code of Regulations, Title 17, Part III, Chapter 1, subchapter 8, section 94006 or Health and Safety Code Section 41960.2 (e):
  - a. faceplate/facecone; vapor splash guard/fill guard/efficiency compliance device (ECD)
  - b. bellows
  - c. latching device spring
  - d. vapor check valve
  - e. spout (proper diameter/vapor collection holes)
  - f. insertion interlock mechanism
  - g. automatic shut-off mechanism
  - h. Hold open latch
5. The hoses are not torn, flattened or crimped.
6. The vapor recovery hoses are the required size and length.
7. The hoses with retractors are adjusted to maintain a proper loop, and the bottom of the loop is within the distance from the island surface certified by the CARB Executive Order for that particular dispenser configuration.
8. The vapor recovery nozzles are equipped with required hoses.
9. The bellows-equipped vapor recovery nozzles are equipped with CARB certified insertion interlock mechanisms.
10. If required, the flow limiter is not missing and is installed properly.
11. The swivels are not missing, defective, or leaking, and the dispenser-end swivels, if applicable, are Fire-Marshall approved with 90-degree stops.
12. If required, the liquid removal devices comply with required CARB certifications and are properly installed.
13. For bellows-less nozzles, the hoses are inverted coaxial type except for Hirt systems, and the vapor collection holes are not obstructed.
14. For vacuum-assist systems, the vapor processing unit and burner are functioning properly.

## **ATTACHMENT C – CONTINUED**

15. For aspirator-assist systems, the major components (i.e. aspirator or jet pump, modulating valve, and vapor check valve) are present inside each dispenser. For aspirator-assist systems with certification-required calibration stickers, the current calibration sticker is present.