

EL DORADO COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 238 -- GASOLINE TRANSFER AND DISPENSING

(Adopted March 27, 2001)

INDEX

	<u>PAGE</u>
238.1 GENERAL	1
A. APPLICABILITY	1
B. EXEMPTION, AGRICULTURE	1
C. EXEMPTION, TESTING	1
D. EXEMPTION, TANK GAUGING AND INSPECTION	1
238.2 DEFINITIONS	1
A. ALTERED FACILITY	1
B. BACKFILLING	1
C. BELLOWS-LESS NOZZLE	1
D. BREAKAWAY COUPLING	1
E. CARB CERTIFIED	1
F. CLEARLY AND PERMANENTLY MARKED	1
G. COAXIAL FILL TUBE	2
H. COAXIAL HOSE	2
I. DISPENSER	2
J. DRY BREAK	2
K. DUAL-POINT DESIGN	2
L. FUELING POSITION	2
M. GASOLINE	2
N. GASOLINE TRANSFER AND DISPENSING FACILITY	2
O. GASOLINE VAPORS	2
P. INSERTION INTERLOCK MECHANISM	2
Q. LIQUID REMOVAL DEVICE	2
R. LIQUID TIGHT	2
S. MAJOR DEFECT	2
T. MINOR DEFECT	2
U. MOBILE FUELER	2
V. MOTOR VEHICLE	2
W. OWNER/OPERATOR	3
X. PRESSURE/VACUUM RELIEF VALVE	3
Y. QUALIFIED MANUFACTURER	3
Z. QUALIFIED REPAIR	3
AA. REBUILD	3
BB. RETAIL GASOLINE TRANSFER AND DISPENSING FACILITY	3
CC. SPILL BOX	3
DD. SUBMERGED FILL TUBE	3
EE. VAPOR CHECK VALVE	3
FF. VAPOR RECOVERY SYSTEM	3
GG. VAPOR TIGHT	3
238.3 STANDARDS	3
A. GASOLINE TRANSFER INTO STATIONARY STORAGE TANKS AND MOBILE FUELERS (PHASE I)	3
B. GASOLINE TRANSFER INTO FUEL TANKS (PHASE II)	5
C. ADDITIONAL REQUIREMENTS	6
D. POSTING OF OPERATING INSTRUCTIONS	8
E. CONTINGENT VAPOR RECOVERY REQUIREMENT	8

F.	REQUIREMENTS FOR NEW OR MODIFIED PHASE II INSTALLATIONS	8
G.	HOLD OPEN LATCH REQUIREMENTS	8
238.4	ADMINISTRATIVE REQUIREMENTS	8
A.	SELF-COMPLIANCE PROGRAM REQUIREMENTS	8
238.5	MONITORING AND RECORDS	9
A.	NEW INSTALLATIONS	9
B.	REVERIFICATION	9
C.	TESTERS	10
D.	RETESTING	10
E.	PARTIAL CLOSURE	10
F.	THROUGHPUT SUBMISSION	11
G.	RECORDKEEPING	11
H.	BURDEN OF PROOF	12
I.	TEST METHODS	12

RULE 238 GASOLINE TRANSFER AND DISPENSING

238.1 GENERAL

- 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. **EXEMPTION, AGRICULTURE:** Transfer of gasoline into or from any stationary storage tank or mobile fueler, with a capacity of 550 gallons or less, 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, is exempt from Phase I and Phase II vapor recovery requirements, provided such tank is equipped with a submerged fill tube.
- C. **EXEMPTION, TESTING:** Transfer of gasoline to and from testing equipment is exempt from the requirements of this rule when equipment is being used to verify the efficiency of the vapor recovery system by the CARB, 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.
- D. **EXEMPTION, TANK GAUGING AND INSPECTION:** Any tank may be opened for gauging or inspection when loading operations are not in progress, provided that such tank is not pressurized.

238.2 DEFINITIONS

- A. **ALTERED FACILITY** is a Gasoline Transfer and Dispensing Facility with any of the following:
 - 1. The removal or addition of storage tank(s), or changes in the number of fueling positions.
 - 2. The replacement of storage tank(s), dispensing nozzle(s) or other equipment with different characteristics or descriptions from those specified on the existing permit.
- B. **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.
- C. **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.
- D. **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 "driveoff."
- E. **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.
- F. **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.

- G. **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.
- H. **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.
- I. **DISPENSER** is a gasoline dispensing unit used for housing the above ground gasoline and vapor recovery piping, the gasoline meters, and to hang gasoline-dispensing nozzles when they are not being used for fueling.
- J. **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.
- K. **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.
- L. **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
- M. **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.
- N. **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.
- O. **GASOLINE VAPORS** are the organic compounds in vapor form displaced during gasoline transfer and dispensing operations, and includes entrained liquid gasoline.
- P. **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.
- Q. **LIQUID REMOVAL DEVICE** is a device designed specifically to remove trapped liquid from the vapor passages of a coaxial hose.
- R. **LIQUID TIGHT** is a liquid leak rate not exceeding three drops per minute.
- S. **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 and as summarized in Attachment A of this rule.
- T. **MINOR DEFECT** is a defect in any gasoline transfer and dispensing equipment, which renders the equipment out of good working order, but does not constitute a major defect.
- U. **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.
- V. **MOTOR VEHICLE** is any self-propelled vehicle as defined in Section 415 of the California Vehicle Code.

- W. **OWNER/OPERATOR** is any person who owns, leases, or operates a gasoline transfer and dispensing facility.
- X. **PRESSURE/VACUUM RELIEF VALVE** is a valve that is installed on the vent pipes of the gasoline storage tanks to relieve pressure and vacuum build-up at preset values of pressure and vacuum.
- Y. **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.
- Z. **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.
- AA. **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.
- BB. **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.
- CC. **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.
- DD. **SUBMERGED FILL TUBE** is any storage tank fill tube with the highest level of the discharge opening entirely submerged, when the liquid level is 6 inches above the bottom of the tank.
- EE. **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.
- FF. **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.
- GG. **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.

238.3 STANDARDS

- A. **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 or trailer into any stationary storage tank with a

capacity of 250 gallons or more, or any mobile fueler tank of greater than 120 gallons capacity unless all of the following conditions are met:

1. Such stationary storage tank or mobile fueler tank is equipped with a "CARB certified" submerged fill tube.
2. Such stationary storage tank or mobile fueler tank is equipped with a "CARB certified" vapor recovery system 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.
3. 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.
4. 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.
5. 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.
6. The following equipment shall be installed, operated and maintained as specified below:
 - a. All fill tubes are equipped with vapor tight caps;
 - b. All dry breaks are equipped with vapor tight seals and vapor tight caps;
 - c. 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 or trailer is not obstructed;
 - d. The fill tube assembly, including fill tube, fittings and gaskets, is maintained to prevent vapor leakage from any portion of the vapor recovery system;
 - e. All stationary storage tank or mobile fueler vapor return lines without dry breaks are equipped with vapor tight caps;
 - f. Each vapor tight cap is in a closed position except when the fill tube or dry break it serves is actively in use; and,
 - g. Each gasoline delivery elbow is equipped with sight windows.
7. 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 matter, and be 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.

8. No coaxial Phase I systems certified by CARB prior to January 1, 1994, may be installed on new or modified tanks, except specified otherwise in the applicable CARB Executive Order.
9. All new Phase I systems must be equipped with a CARB-certified anti-rotational coupler or swivel adapter.

B. GASOLINE TRANSFER INTO VEHICLE FUEL TANKS (PHASE II): A person shall not transfer, allow the transfer of, or provide equipment for the transfer of gasoline from a stationary storage tank, with a capacity of 250 gallons or greater, or a mobile fueler, with a capacity of 120 gallons or greater, into any mobile fueler with a capacity of 120 gallons or greater or any motor vehicle fuel tank with a capacity of 5 gallons or greater unless all of the following conditions are met:

1. The dispensing unit used to transfer the gasoline is equipped with a CARB certified vapor recovery system 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.
2. The vapor recovery system and associated components are operated and maintained in accordance with the manufacturer's specifications and the applicable CARB certification. The system and associated components shall be vapor tight and liquid tight at all times.
3. Equipment subject to this rule is operated and maintained without any major defects.
4. Each balance-system nozzle is equipped with a CARB certified insertion interlock mechanism and a CARB certified vapor check valve located in the nozzle.
5. Each gasoline-dispensing nozzle is equipped with a CARB certified coaxial hose.
6. Unless otherwise specified in the applicable CARB Executive Order, all liquid removal devices installed for any gasoline-dispensing nozzle shall be CARB certified with a minimum liquid removal rate of five milliliters per gallon transferred.
7. The breakaway coupling is CARB certified. Any breakaway coupling that is installed after April 21, 2001, shall be equipped with a poppet valve, which shall close and maintain the gasoline vapor and liquid lines both vapor tight and liquid tight when the coupling is separated. In the event of a separation due to a "driveoff", the owner/operator shall complete one of the following and document the activities pursuant to Section 238.5 G.
 - a. Conduct a visual inspection of the effected equipment and perform qualified repairs on any damaged components before placing any effected equipment back in service. In addition, the applicable reverification tests pursuant to Section 238.5 B.1., or equivalent test methods as approved in writing by the APCO and CARB, shall be conducted and successfully passed within 24 hours after the effected equipment is placed back in service; or
 - b. Conduct a visual inspection of the effected equipment and replace the effected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or CARB certified rebuilt components, before placing any of the effected equipment back in service.
8. A person shall not install or operate a vapor recovery nozzle unless it is equipped with a coaxial hose.

9. A person shall not install or operate a gasoline dispenser at a gasoline dispensing facility unless the connection between the riser and the dispenser cabinet is constructed from either galvanized piping or flexible tubing that is listed for use with gasoline. The nominal diameter of this connector shall not be less than 1 inch.
10. No person shall install a vacuum assist Phase II vapor recovery system unless it has been certified by CARB to be compatible with ORVR.
11. Liquid retain from any nozzle shall not exceed 100 ml per 1,000 gallons dispensed or the quantity specified in CARB Certification Procedure CP-201, whichever is less.
12. Spitting from any nozzle shall not exceed 1.0 ml per nozzle per test or the quantity specified in CARB Certification Procedure CP-201, whichever is less.

C. ADDITIONAL REQUIREMENTS

1. 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 components 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.
2. For a breakdown (as defined in Rule 101) of a central vapor incineration or processing unit, the provisions of Rule 516 shall apply.
3. A person shall not perform or allow the "pump-out" (bulk transfer) of gasoline from a storage tank subject to Section 238.3 A. unless such bulk transfer is performed using a vapor collection and transfer system capable of returning the displaced vapors to the stationary storage tank.
4. The owner/operator shall conspicuously post the District-required signs specified in Attachment B of this rule in the immediate gasoline dispensing area.
5. For a dispenser that is not to be used to fuel motor vehicles, the owner/operator shall have a sign posted on it stating such, and shall not allow for it to be used to fuel motor vehicles.
6. A person shall not store, or allow the storage of, gasoline in any stationary storage tank with a capacity of 250 gallons or more, or any mobile fueler with a capacity of 120 gallons or more, unless the vent pipe of the tank complies with all of the following:
 - a. The vent pipe opening is equipped with a CARB certified pressure/vacuum relief valve.
 - b. The vent pipe opening for a stationary storage tank is at least 12 feet above the driveway level used for tank truck filling operations.
 - c. Unless otherwise specified in the applicable CARB Executive Order, the pressure/vacuum relief valve for an underground storage tank vent shall be set for pressure relief at 3.0 plus or minus 0.5 inches water column and vacuum relief at 8.0 plus or minus 2.0 inches water column. The valves for vents on aboveground tanks and mobile fuelers shall meet the specifications in the applicable CARB Executive Order.

- d. 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 and vacuum settings. The color codes or marks shall be legible to ground-level observers.
 - e. 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.
7. 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 groundwater, or the enter the sewer system.
 8. The failure of an owner/operator to meet any requirements of Section 238.3 of this rule shall constitute a violation. Such non-compliant equipment shall be tagged "Out of Order".
 9. Except during active repair activity, the "Out of Order" tag specified in Section 238.3 C.8. 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:
 - a. The non-compliant equipment has been repaired, replaced, or adjusted, as necessary; and,
 - b. The non-compliant equipment has been reinspected and/or authorized for use by the APCO or his designee.
 10. 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.
 11. The owner/operator shall have all underground storage tank installation and associated piping configuration inspected by the APCO 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 shall notify the District by telephone or other District approved method, and obtain a confirmation number at least three business days prior to the backfilling. All piping shall be supported with pea gravel up to the midpoint of the pipe.
 12. No later than December 31, 2001, the owner/operator of a 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 manual shall, at a minimum, include the following information:
 - a. All applicable CARB Executive Orders, Approval Letters, and District Permits.
 - b. 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.

- c. System and/or component testing requirements, including test schedules and passing criteria for each of the standard tests listed under Section 238.5 I. The owner/operator may include any non-CARB required diagnostic and other tests as part of the testing requirements.
 - d. 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. **POSTING OF OPERATING INSTRUCTIONS:** Each gasoline dispensing facility utilizing a Phase II system shall conspicuously post operating instructions specific to the system in use in the gasoline dispensing area. The instructions shall clearly describe how to fuel vehicles correctly with the vapor recovery nozzles utilized at the station. The instructions shall also include a warning that topping off is prohibited, and may result in spillage or recirculation of gasoline.
- E. **CONTINGENT VAPOR RECOVERY REQUIREMENT:** Facilities that are equipped with Phase II vapor recovery must also be equipped with Phase I vapor recovery.
- F. **REQUIREMENTS FOR NEW OR MODIFIED PHASE II INSTALLATIONS:** Effective as prescribed by California Code of Regulations Title 17, Section 94011, no person shall install or modify a Phase II vapor recovery system unless all new equipment is CARB-certified to meet the following emission limitations without any maintenance being performed on that equipment for 90 days prior to the certification test:
- 1. The total emission rate for organic compounds from the nozzle/fill pipe interface, storage tank vent pipes, and pressure-related fugitives shall not exceed 0.42 pounds per 1,000 gallons of gasoline dispensed.
 - 2. The emission rate for organic compounds from spillage shall not exceed 0.42 pounds per 1,000 gallons of gasoline dispensed.
 - 3. The emission rate for organic compounds from liquid retain and spitting shall not exceed 0.42 pounds per 1,000 gallons of gasoline dispensed.
- G. **HOLD OPEN LATCH REQUIREMENTS:** A person shall not operate a nozzle that dispenses gasoline at a retail gasoline dispensing facility or a gasoline dispensing facility operated by the state or any county, city and county, or city unless the nozzle is equipped with an operating hold open latch. Any hold open latch determined to be inoperative may be repaired or replaced by the owner or operator within 48 hours of notification by the APCO or fire marshal without any fines or penalty action.

238.4 ADMINISTRATIVE REQUIREMENTS

- A. **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 C 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 D 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 Section 238.5 G. before being returned to service.
3. Defects discovered during self-inspection and repaired shall not constitute a violation.
4. Any new self-compliance program or revisions to the existing self-compliance program as specified in Section 238.4 A.1 shall be submitted in writing to the District for approval before implementation.
5. Training and Certification
 - a. Beginning September 1, 2001, a person shall not conduct daily maintenance inspections specified in Section 238.4 A.1.a. unless such person has satisfactorily completed an appropriate District-approved training program.
 - b. Beginning September 1, 2001, a person shall not conduct periodic compliance inspections specified in Section 238.4 A.1.b. unless such person has satisfactorily completed an appropriate District-approved training program in the inspection and maintenance of vapor recovery systems.

238.5 MONITORING AND RECORDS

- A. **NEW INSTALLATION:** Within 30 calendar days of 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 Permit, in accordance with the test methods specified in Section 238.5 I. to verify the proper installation and operation of Phase I and Phase II vapor recovery systems.
- B. **REVERIFICATION:** The owner/operator shall conduct and successfully pass the applicable reverification tests in accordance with the test methods specified in Section 238.5 I. to verify the proper operation of the vapor recovery system as follows:
 1. Except as specified in the applicable CARB Executive Orders, the reverification tests shall include the following, as applicable:
 - a. Static pressure (leak decay) test (Phase I and Phase II systems).
 - b. Air-to-liquid (A/L) ratio test (facility with bellows-less nozzles).
 - c. Dynamic pressure (back-pressure) test (All Phase II systems).
 - d. Liquid removal test (systems with a liquid removal device required by CARB Executive Orders).
 2. 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:
 - a. The owner/operator of a facility with a maximum monthly throughput of 100,000 gallons or greater shall complete and pass the reverification tests no less

frequently than every six months, with the first test being no later than June 1, 2001

b. The owner/operator of a facility with a maximum monthly throughput less than 100,000 gallons shall complete and pass the reverification tests no less frequently than every 12 months, with the first test being no later than August 1, 2001.

3. The owner/operator of a non-retail gasoline transfer and dispensing facility shall complete and pass the reverification tests no less frequently than every 12 months, with the first test being no later than October 1, 2001.

C. **TESTERS:** A person who conducts performance or reverification tests shall comply with all of the following:

1. Conduct performance or reverification tests in accordance with the applicable test methods listed in Section 238.5 I. and other CARB testing procedures. Tests shall be conducted using calibrated equipment meeting the calibration range and calibration intervals specified by the manufacturer.
2. Notify the District by telephone or other District approved methods and obtain a confirmation number at least ten business days prior to testing, except as specified in Section 238.5 D. Notwithstanding, the ten-day notice may not be required for reverification tests conducted after a driveoff pursuant to Section 238.3 B.7.a., provided that the person conducting the tests complies with all other applicable provisions of the rule.
3. Conduct the tests during business hours Monday through Friday, unless written approval to deviate from normal testing hours is received from the APCO in advance of the testing.
4. Submit a copy of the test report in a District approved format to the APCO within 48 hours after each test is conducted. The test report shall include all the required records of tests, test data, a statement whether the system or component tested meets or fails to meet the required standards, and the name and signature of the person responsible for conducting the tests and the company the tester is employed by. The person responsible for conducting the tests shall have completed a District approved class for testing and any subsequent refresher classes as required.

D. **RETESTING:** Notwithstanding Section 238.5 C.2., the owner/operator of a gasoline transfer and dispensing facility that has failed a reverification test or any portion thereof may retest the facility prior to resuming operation provided that the person conducting the tests has complied with one of the following:

1. Notify the District by telephone or other District approved methods and obtain a confirmation number at least 24 hours prior to retesting (at least nine of the hours shall be regular District business hours); or
2. If repairs are performed during the same day the facility failed any 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 documented in the test reports and the repair logs, pursuant to Sections 238.5 G.2. and 238.5 G.3.

E. **PARTIAL CLOSURE:** 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

the remaining equipment passed the reverification tests and is unaffected by the shut down equipment. All test results and the method of isolating the defective equipment shall be documented in the test reports to be submitted to the APCO pursuant to Section 238.5 G.3.

- F. **THROUGHPUT SUBMISSION:** The owner/operator shall submit the facility's monthly gasoline throughput data to the APCO in conjunction with the reverification test report for each testing and reporting period.
- G. **RECORDKEEPING:** A person who performs 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 driveoff) 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 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 five years. Notwithstanding, records for non-retail gasoline dispensing facilities that are unmanned may be kept at other locations approved by the APCO. All records shall be made available to the District personnel upon request both on site during inspections and offsite as specified.
1. Records of all defective components identified or repaired during self-compliance inspections.
 2. Repair logs, which shall include:
 - a. Date and time of each repair.
 - b. The name of the person(s) who performed the repair, and, if applicable, the name, address, and telephone number of the person's employer.
 - c. Description of service performed.
 - d. Each component that was repaired, serviced, or removed, including the required component identification information pursuant to Section 238.3 C.1.
 - e. Each component that was installed as replacement, if applicable, including the required component identification information pursuant to Section 238.3 C.1.
 - f. 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.
 3. Records of tests, which shall include:
 - a. Date and time of each test.
 - b. District confirmation number of each notification.
 - c. Name, affiliation, address, and telephone number of the person(s) who performed the test.
 - d. Test data and calibration data for all equipment used.
 - e. 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.

- f. For a retest following a failed performance or reverification test, description of repairs performed pursuant to Section 238.5 G.2.
 - g. Copies of test reports in a District approved format.
 - 4. Monthly gasoline throughput records.
- H. **BURDEN OF PROOF:** The burden of proof of eligibility for exemption from any section of this rule is on the owner/operator. Anyone seeking an exemption shall maintain records necessary to support such exemption and furnish them to District personnel upon request.
- I. **TEST METHODS:** The performance and reverification tests shall be conducted in accordance with the following test methods. All test methods referenced in this section 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 above ground 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. Any other test methods approved by the USEPA, CARB, and the District for underground tanks, aboveground tanks, and mobile fuelers.

Adopted: March 27, 2001

Amended:

Rescinded:

ATTACHMENT A

CALIFORNIA CODE OF REGULATIONS, SECTION 94006
SUBCHAPTER 8, CHAPTER 1, PART III OF TITLE 17

94006. Defects Substantially Impairing the Effectiveness of Vapor Recovery Systems Used in Motor Vehicle Fueling Operations.

For the purposes of Section 41960.2 of the Health and Safety Code, the following constitute equipment defects in systems for the control of gasoline vapors resulting from motor vehicle fueling operations which substantially impair the effectiveness of the systems in reducing air contaminants:

- a. Absence or disconnection of any component required to be used in the Executive Order(s) that certified the system.
- b. A vapor hose which is crimped or flattened such that the vapor passage is blocked, or the pressure drop through the vapor hose exceeds by a factor of two or more the requirements in the system certified in the CARB Executive Order(s) applicable to the system.
- c. A nozzle bellows which is torn in one or more of the following manner:
 1. triangular-shaped or similar tear 1/2 inch or more to a side, or hole 1/2 inch or more in diameter or,
 2. Slit 1 inch or more in length.
- d. Faceplate or flexible cone which is damaged in the following manner:
 1. For balance nozzles and for nozzles for aspirator and educator-assist type systems, damage shall be such that the capability to achieve a seal with a fill pipe interface is affected for 1/4 of the circumference of the faceplate (accumulated).
 2. For nozzles for vacuum assist-type systems, more than 1/4 of the flexible cone missing.
- e. Nozzle shutoff mechanisms which malfunction in any manner.
- f. Vapor return lines, including such components as swivels, anti-recirculation valves and underground piping, which malfunction or are blocked, or restricted such that the pressure drop through the lines exceeds by factor of two or more requirements specified in the Executive Order(s) that certified the system.
- g. Vapor processing unit which is inoperative.
- h. Vacuum producing device which is inoperative.
- i. Pressure/vacuum relief valves, vapor check valves, or dry breaks which are inoperative.
- j. Any equipment defect which is identified in an Executive Order certifying a system pursuant to the Certification Procedures incorporated in Section 94001 of Title 17, California Code of Regulations, as substantially impairing the effectiveness of the system in reducing air contaminants.

All nozzles affected by the above defects are to be considered defective.

NOTE: Authority Cited: Sections 39600, 39601, 41960.2, Health and Safety Code.

ATTACHMENT B

DISTRICT REQUIRED SIGNS

- A. The operator shall post nozzle operating instructions and the following signs:
1. ARB toll-free telephone number:

"If you have nozzle problems, please call the Air District at the toll-free number (800) 952-5588" or equivalent information approved if in writing by the APCO; and
 2. A "warning" stating:

"TOXIC RISK - FOR YOUR OWN PROTECTION
DO NOT BREATHE FUMES
DO NOT TOP TANKS"
- B. All required signs shall conform to all of the following:
1. For decal signs:
 - a. Each sign shall be visible from all fueling positions it serves; and,
 - b. Sign shall be readable from a distance of 3 feet.
 2. All other signs:
 - a. For pump toppers, one double-back sign per island;
 - b. For permanent (non-decal) signs, two single-sided or one double-sided sign(s) per two (2) dispensers; and,
 - c. Be readable from a distance of at least 6 feet.

ATTACHMENT C

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 D

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 compliant 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.
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 Attachment A 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.
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.
16. For aspirator-assist systems with certification-required calibration stickers, the current calibration sticker is present.