

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT

RULE 2.22 -- GASOLINE DISPENSING FACILITIES

(Adopted January 11, 1995) (Revised June 12, 2002)

INDEX

100 GENERAL

- 101 PURPOSE
- 102 APPLICABILITY
- 110 EXEMPTIONS - GENERAL
- 111 EXEMPTIONS - FACILITY THROUGHPUT LESS THAN 24,000 GALLONS PER YEAR

200 DEFINITIONS

- 201 ALTERED FACILITY
- 202 AS-IS-CONDITION
- 203 BACKFILLING
- 204 BELLOWS-LESS NOZZLE
- 205 BREAKAWAY COUPLING
- 206 CARB CERTIFIED OR CERTIFIED BY CARB
- 207 CLEARLY AND PERMANENTLY MARKED
- 208 COAXIAL FILL TUBE
- 209 COAXIAL HOSE
- 210 DISPENSER
- 211 DRY BREAK OR POPPETED DRY BREAK
- 212 DUAL POINT DESIGN
- 213 FUELING POSITION
- 214 GASOLINE
- 215 GASOLINE DISPENSING FACILITY
- 216 GASOLINE VAPORS
- 217 INSERTION INTERLOCK MECHANISM
- 218 LIQUID TIGHT
- 219 LIQUID REMOVAL DEVICE
- 220 MAJOR DEFECT
- 221 MINOR DEFECT
- 222 MOTOR VEHICLE
- 223 OWNER/OPERATOR
- 224 PHASE I
- 225 PHASE II
- 226 PRESSURE/VACUUM RELIEF VALVE
- 227 QUALIFIED MANUFACTURER
- 228 QUALIFIED REPAIR
- 229 REBUILD
- 230 RETAIL GASOLINE DISPENSING FACILITY
- 231 SPILL BOX
- 232 SUBMERGED FILL TUBE
- 233 TOPPING OFF

- 234 TRANSPORT VESSEL
- 235 VAPOR CHECK VALVE
- 236 VAPOR RECOVERY SYSTEM
- 237 VAPOR TIGHT

300 STANDARDS

- 301 OPERATING PRACTICES
- 302 CERTIFICATION REQUIREMENTS
- 303 TOPPING OFF
- 304 GASOLINE TRANSFER INTO STORAGE TANKS (PHASE I)
- 305 GASOLINE DISPENSING INTO MOTOR VEHICLE FUEL TANKS
(PHASE II)
- 306 SELF-COMPLIANCE PROGRAM
- 307 DAILY MAINTENANCE INSPECTION PROTOCOL
- 308 PERIODIC INSPECTION PROTOCOL
- 309 SOURCE TESTING
- 310 PROHIBITION OF USE
- 311 POSTING OF OPERATING INSTRUCTIONS

400 ADMINISTRATIVE REQUIREMENTS

- 401 COMPLIANCE SCHEDULE
- 402 VIOLATIONS

500 MONITORING AND RECORDS

- 501 PREVENTATIVE MAINTENANCE PROGRAM
- 502 RECORD KEEPING

600 TEST METHODS AND PROCEDURES

- 601 STATIC PRESSURE DECAY
- 602 DYNAMIC PRESSURE
- 603 AIR-TO-LIQUID RATIO
- 604 LIQUID REMOVAL RATE
- 605 STORAGE TANK MANIFOLD
- 606 VAPOR TIGHT CONDITION

100 GENERAL

- 101 **PURPOSE:** The purpose of this rule is to limit displaced gasoline vapors from storage tanks, transport vessels, and motor vehicle fuel tanks using CARB certified Phase I and II vapor recovery systems.
- 102 **APPLICABILITY:** This rule applies to the transfer of gasoline from any transport vessel into any storage tank, and dispensing from any storage tank into any motor vehicle fuel tank.
- 110 **EXEMPTIONS:** The provisions of this rule shall not apply to:
- 110.1 Stationary storage tanks that are used exclusively for the fueling of implements of husbandry.
 - 110.2 Dispensing systems of 250 gallons capacity or less.
 - 110.3 Vehicle to vehicle refueling.
 - 110.4 Facilities which exclusively refuel aircraft.
 - 110.5 Facilities which exclusively refuel motor vehicle tanks with a capacity of 5 gallons or less.
- 111 **EXEMPTION - FACILITY THROUGHPUT LESS THAN 24,000 GALLONS PER YEAR:** The provisions of Section 305 shall not apply to any existing facility with an aggregate facility throughput of less than or equal to 24,000 gallons of gasoline per year.

200 DEFINITIONS

- 201 **ALTERED FACILITY:** A gasoline dispensing facility where:
- 201.1 The removal or addition of storage tank(s), or changes in the number of fueling positions; or
 - 201.2 The replacement of storage tank(s), dispensing nozzle(s) or other equipment with different characteristics or descriptions from those specified on the existing Permit to Operate.

- 202 **AS-IS-CONDITION:** The unadjusted condition of any gasoline dispensing facility that exists on the day of the test, prior to conducting the test.
- 203 **BACKFILLING:** The covering of the storage tank, piping or any associated components with soil, aggregate or other materials prior to laying the finished surface.
- 204 **BELLOWS-LESS NOZZLE:** Any nozzle that incorporates an aspirator or vacuum assist system and a gasoline vapor capture mechanism at the motor vehicle filler neck, such that the vapors are collected at the vehicle filler neck without the need for an interfacing flexible bellows.
- 205 **BREAKAWAY COUPLING:** 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."
- 206 **CARB CERTIFIED OR CERTIFIED BY CARB:** 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.
- 207 **CLEARLY AND PERMANENTLY MARKED:** An identification of the 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.
- 208 **COAXIAL FILL TUBE:** 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 transport vessel.

- 209 **COAXIAL HOSE:** 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 displaced gasoline vapors from the vehicle fuel tank to the storage tank.
- 210 **DISPENSER:** A gasoline dispensing unit used for housing the above ground gasoline and vapor recovery piping, the gasoline meters, and hanger for the gasoline-dispensing nozzles when they are not in use.
- 211 **DRY BREAK OR POPPETED DRY BREAK:** 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.
- 212 **DUAL-POINT DESIGN:** A type of Phase I vapor recovery system that delivers gasoline liquid into storage tanks and recovers the displaced vapors through two separate openings in the tank.
- 213 **FUELING POSITION:** A fuel dispensing unit consisting of nozzle(s) and meter(s) with the capability to deliver only one fuel product at one time.
- 214 **GASOLINE:** Any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 4.0 pounds per square inch or greater, determined in accordance with ASTM Test Method D-323-99a, and used as a motor vehicle fuel or any fuel which is commonly or commercially known or sold as gasoline.
- 215 **GASOLINE DISPENSING FACILITY:** Any stationary facility that dispenses gasoline directly into the fuel tanks of motor vehicles. This facility shall be treated as a single source which includes all necessary equipment for the exclusive use of the facility, such as nozzles, dispensers, pumps, vapor return lines, plumbing, and storage tanks.
- 216 **GASOLINE VAPORS:** The organic compounds in vapor form displaced during gasoline transfer and dispensing operations, and includes entrained liquid gasoline.
- 217 **INSERTION INTERLOCK MECHANISM:** 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.

- 218 **LIQUID TIGHT:** A liquid leak rate of no more than 3 drops per minute.
- 219 **LIQUID REMOVAL DEVICE:** A device designed specifically to remove trapped liquid from the vapor return portion of a coaxial hose.
- 220 **MAJOR DEFECT:** 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.
- 221 **MINOR DEFECT:** A defect in any gasoline dispensing equipment, which renders the equipment out of good working order but which does not constitute a major defect.
- 222 **MOTOR VEHICLE:** Any self-propelled vehicle as defined in Section 415 of the California Vehicle Code.
- 223 **OWNER/OPERATOR:** Any person who owns, leases, or operates a gasoline dispensing facility.
- 224 **PRESSURE/VACUUM RELIEF VALVE:** A valve that is installed on the vent pipes of the gasoline storage tank to relieve pressure or vacuum build-up at preset values of pressure or vacuum within the tank.
- 225 **QUALIFIED MANUFACTURER:** 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.
- 226 **QUALIFIED REPAIR:** A repair or maintenance of the gasoline 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.

- 227 **REBUILD:** 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.
- 228 **RETAIL GASOLINE DISPENSING FACILITY:** Any gasoline dispensing facility subject to the payment of California sales tax for the sale of gasoline to the public.
- 229 **SPILL BOX:** 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.
- 230 **SUBMERGED FILL TUBE:** 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:
- 230.1 6 inches, for tanks filled from the top; or
- 230.2 18 inches for tanks filled from the side.
- 231 **TRANSPORT VESSEL:** Any tank truck, trailer, or railroad tank car that is equipped to receive and transport organic liquid.
- 232 **VAPOR CHECK VALVE:** 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.
- 233 **VAPOR RECOVERY SYSTEM:** A system installed at a gasoline dispensing facility for collection and recovery of gasoline vapors displaced or emitted from the storage tanks (Phase I) and during refueling of motor 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.

- 234 **PHASE I:** A gasoline vapor recovery system or equipment that recovers the vapors generated during the transfer of gasoline from transport vessels into storage tanks.
- 235 **PHASE II:** A gasoline vapor recovery system or equipment that recovers the vapors generated during the fueling from storage tanks.
- 236 **TOPPING OFF:** To attempt to dispense gasoline to a motor vehicle or utility equipment fuel tank after the vapor recovery dispensing nozzle primary shutoff mechanism has engaged. The filling of those vehicle tanks, which, because of the nature and configuration of the fill pipe, causes premature shut off of the dispensing nozzle, and which are filled only after the seal between the fill pipe and the nozzle is broken, shall not be considered topping off.
- 237 **VAPOR TIGHT:** A vapor leak of less than 10,000 ppm hydrocarbon concentration, as determined by EPA Reference Method 21, using an appropriate analyzer calibrated with methane.

300 STANDARDS

- 301 **OPERATING PRACTICES:** 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 public sewer system.
- 302 **CERTIFICATION REQUIREMENTS:** A person shall not offer for sale, sell or install within the District any Phase II vapor recovery equipment unless such equipment is CARB certified. In addition, all new or rebuilt vapor recovery equipment shall be clearly identified or marked by the certified manufacturing company and/or the certified rebuilding company.
- 303 **TOPPING OFF:** A person shall not top off motor vehicle fuel tanks.

- 304 **GASOLINE TRANSFER INTO STORAGE TANKS (PHASE I):** A person shall not transfer, allow the transfer or provide equipment for the transfer of gasoline from any transport vessel into any storage tank with a capacity of 251 gallons or more unless all of the following conditions are met:
- 304.1 Such storage tank is equipped with a CARB certified vapor recovery system that recovers or processes displaced gasoline vapors by at least 95% by weight, or having a minimum volumetric efficiency of 98% and an emission factor not exceeding 0.15 pounds per 1,000 gallons, as applicable.
- 304.2 The vapor recovery system shall be maintained and operated according to the manufacturer's specifications and as per the most recent applicable CARB Executive Orders.
- 304.3 All vapor return lines are connected between the transport vessel and the storage tank while gasoline is transferred, and all associated hoses, fittings, and couplings are maintained in a liquid tight and vapor tight condition.
- 304.4 Such storage tank is equipped with a CARB certified submerged fill tube.
- 304.5 The fill tube shall be maintained liquid tight, vapor tight, and free of air ingestion. A fill tube that is free of air ingestion is determined by observing the gasoline stream as clear and free of air bubbles through the sight windows on the fill tube, except during the initial and final 60 seconds of gasoline transfer.
- 304.6 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 storage tank back to the transport vessel 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 storage tank 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.

304.7 Any time an underground storage tank is installed or replaced at any gasoline 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 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.

304.8 Except when otherwise specified in the most recent 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.

304.9 The hatch on any transport vessel shall be equipped and operated 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 3 minutes following the completion of the gasoline transfer or pumping. Except

otherwise specified by CARB, visual inspection shall be completed in 3 minutes or less.

304.10 Effective January 1, 1996, all open pipe vents on stationary tanks at gasoline dispensing facilities shall be equipped with a pressure-vacuum relief valve. Unless otherwise specified in the most recent applicable CARB Executive Orders, the pressure relief for an underground storage tank shall be set for pressure relief at 3 ± 0.5 inches water column and vacuum relief at 8 ± 0.5 inches water column. For the purpose of this section, vent pipes of storage tanks may be manifolded according to the most recent applicable CARB Executive Order.

304.11 Each aboveground storage tank shall be equipped with a pressure-vacuum relief valve according to the most recent applicable CARB Executive Orders.

304.12 The vent pipe opening on underground tanks shall be at least 12 feet above the driveway level used for transport vessel filling.

305 **GASOLINE DISPENSING INTO MOTOR VEHICLE FUEL TANKS (PHASE II):** A person shall not dispense or allow the dispensing or provide equipment for the dispensing of gasoline to a motor vehicle fuel tank with a capacity of greater than 5 gallons from a gasoline dispensing system unless all of the following requirements are met:

305.1 The transfer is made with a dispensing unit that is equipped with a CARB certified Phase II vapor recovery system to recover or process displaced gasoline vapors at an efficiency of at least 95% by weight, or having an emission factor not exceeding 0.38 pounds per 1,000 gallons of gasoline dispensed, as applicable.

305.2 The vapor recovery system and associated components shall be operated and maintained in a manner in accordance with the manufacturer's specifications and as per the most recent applicable CARB Executive Orders.

- 305.3 The vapor recovery system and associated components shall be operated and maintained free of major defects and in a vapor and liquid tight condition at all times.
- 305.4 Where District personnel determines that any vapor recovery component contains a minor defect, District personnel shall provide the owner/operator with a notice of correction specifying the basis on which the component is deemed defective. The owner/operator shall repair or replace such component and provide the District with adequate evidence that the component is in good working order within 7 days of receiving the notice. Furthermore, if the APCO makes a determination that any vapor recovery component may not be in compliance with any provision of this rule, the APCO may require the owner/operator to conduct and successfully pass an applicable test in accordance with the test methods and procedures specified in Section 600 to verify compliance.
- 305.5 Each balance-system nozzle shall be equipped with a CARB certified insertion interlock mechanism and a CARB certified vapor check valve.
- 305.6 All balance-system nozzle boots shall be replaced at least once per year and tested to verify compliance with the vapor path leak requirements and a record made in the maintenance log prior to continued operation.
- 305.7 Each gasoline-dispensing nozzle shall be equipped with a CARB certified coaxial hose.
- 305.8 Unless otherwise specified in the most recent applicable CARB Executive Orders, all liquid removal devices installed for any gasoline-dispensing nozzle with a dispensing rate of greater than 5 gallons per minute shall be CARB certified with a minimum liquid removal rate of 5 milliliters per gallon dispensed.

305.9 Each breakaway coupling shall be CARB certified and shall be equipped with a poppet valve. The poppet valve shall close and maintain both the gasoline vapor and liquid lines vapor tight and liquid tight when the coupling is separated.

305.10 In the event of a separation of a hose from the dispenser or a hose from the nozzle (i.e., "driveoff"), the owner/operator shall complete one of the following and document the repair activities as specified in Section 502:

- a. Conduct a visual inspection of the affected equipment and perform qualified repairs on any damaged components before placing the affected equipment back in service. In addition, the applicable reverification tests as specified in Section 309.1 shall be conducted and successfully passed within 24 hours after the affected equipment is placed back in service, or
- b. 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 equipped back in service.

The owner/operator shall notify the District within 24 hours of completing the requirements specified in Sections 305.10.a or 305.10.b.

305.11 The owner/operator shall have all storage tank installation and the associated piping configuration inspected by District personnel prior to backfilling, to verify that all underground equipment is properly installed in accordance with the requirements specified in the most recent applicable CARB Executive Orders. The owner/operator shall notify the District at least 3 days prior to the backfilling.

306 SELF-COMPLIANCE PROGRAM:

- 306.1 The owner/operator of any retail gasoline dispensing facility (GDF) shall implement a self-compliance program as follows:
- a. Inspection and maintenance procedures shall be conducted daily in accordance with the protocol specified in Section 307 to ensure proper operating conditions of all components of the vapor recovery systems.
 - b. Inspections procedures shall be conducted at least once every 12 months in accordance with the protocol specified in Section 308 to verify the compliance with all applicable District rules and regulations, as well as all permit conditions.

- 306.2 The owner/operator of any non-retail (GDF) shall implement a self-compliance program as follows:
- a. Inspection and maintenance procedures shall be conducted at least once every 3 months in accordance with the protocol specified in Section 307 to ensure proper operating conditions of all components of the vapor recovery systems.
 - b. Inspections procedures shall be conducted at least once every 12 months in accordance with the protocol specified in Section 308 to verify the compliance with all applicable District rules and regulations, as well as all permit conditions.

307 **DAILY MAINTENANCE INSPECTION PROTOCOL:** The owner/operator of a retail gasoline dispensing facility shall at minimum verify the following and record the results in the District-approved report format during the daily maintenance inspection:

- 307.1 Phase I Vapor Recovery System
- a. The spill container is clean and does not contain gasoline.
 - b. The fill caps are not missing, damaged or loose.
 - c. If applicable:
 - (i) the spring-loaded submerged fill tube seals properly against the coaxial fitting;

- (ii) the dry break (poppet valve) is not missing or damaged.
- d. The submerged fill tube is not missing or damaged.

307.2 Phase II Vapor Recovery System

- a. The fueling instructions are clearly displayed.
- b. The hoses are not torn, flattened or crimped.
- c. The vapor recovery hoses are the required size and length.
- d. 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 most recent applicable CARB Executive Orders for that particular dispensing configuration.
- e. The following nozzle components are in place and in good condition, as specified in the most recent applicable CARB Executive Orders:
 - (i) bellows
 - (ii) latching device spring
 - (iii) vapor check valve
 - (iv) spout (proper diameter/vapor collection holes
 - (v) insertion interlock mechanism
 - (vi) automatic shut-off mechanism
 - (vii) hold open latch
 - (viii) face plate/face cone, vapor splash guard, fill guard, efficiency compliance device.
- f. For vacuum-assist systems, the vapor processing unit and burner are functioning properly.

307.3 Any equipment not meeting the requirements specified above or any equipment with major defect(s) which are identified during the inspection procedures shall be removed from service, repaired, brought into compliance, and duly entered into the repair logs in accordance with the requirements specified in Section 502 before being returned to service. Major defect(s) discovered during self inspection and that are repaired shall not constitute a violation of District Rule 2.22.

308 **PERIODIC INSPECTION PROTOCOL:** The owner/operator of a retail gasoline dispensing facility shall at minimum verify the following and record the results in the District-approved report format during the periodic compliance inspections:

308.1 General Inspection

- a. The District permit is current.
- b. The equipment and District Permit to Operate description match.
- c. The facility complies with all permit conditions.
- d. The required sign is properly posted and the sign contains all the necessary information.

308.2 Phase I Vapor Recovery System Inspection

- a. The distance between the highest level of the discharge opening of the submerged fill tube and the bottom of the storage tank does not exceed 6 inches.
- b. The Phase I vapor recovery system complies with required CARB certification and is properly installed.
- c. The spill box complies with required CARB certification and is properly installed.
- d. The vent pipes are equipped with the required pressure/vacuum relief valves.

308.3 Phase II Vapor Recovery System Inspection

- a. Each nozzle is the current CARB certified model.
- b. Each nozzle is installed in accordance with the most recent applicable CARB Executive Orders.
- c. The bellows-equipped vapor recovery nozzles are equipped with CARB certified insertion interlock mechanisms.
- d. If required, the flow limiter is not missing and is installed properly.
- e. The swivels are not missing, defective, or leaking, and the dispenser-end swivels, if applicable, are Fire-Marshall approved with 90-degree stops.
- f. If required, the liquid removal devices comply with required CARB certifications and are properly installed.
- g. For bellows-less nozzles, the hoses are inverted coaxial type except for Hirt

systems, and the vapor collection holes are not obstructed.

- h. 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.

309 **SOURCE TESTING:** Within 45 calendar days of the initial operation of a new or altered gasoline dispensing facility, the owner/operator shall conduct and successfully pass the source tests required by the applicable District Authority to Construct permits and the most recent applicable CARB Executive Orders, in accordance with the test methods and procedures as specified in Section 600 to verify the proper installation and operation of Phase I and II vapor recovery systems.

309.1 The owner/operator shall conduct and successfully pass the applicable reverification tests using the most recent applicable CARB Executive Orders, in accordance with the test methods and procedures as specified in Section 600 to verify proper operation of the vapor recovery system as follows:

- a. Static pressure test (Phase I and II systems).
- b. Air-to-liquid ratio test for facilities with bellows-less nozzles.
- c. Dynamic pressure test for all gasoline dispensing facilities.
- d. Liquid removal test for systems with a liquid removal device required by the most recent applicable CARB Executive Orders.

309.2 The owner/operator of a gasoline dispensing facility with a Permit to Operate throughput limit of 4,000,000 gallons per year or greater shall complete the reverification test initially no later than December 12, 2002, and semiannually thereafter. Each semiannual test shall be completed within 6 months of the previous successful test. No adjustments to the gasoline dispensing facility shall be made

the day of the test and the test shall be conducted in an as-is-condition.

309.3 The owner/operator of a gasoline dispensing facility with a Permit to Operate throughput limit less than 4,000,000 gallons per year shall complete the reverification test initially no later than June 12, 2003, and annually thereafter. Each annual test shall be completed within 12 months of the previous successful test. No adjustments to the gasoline dispensing facility shall be made the day of the test and the test shall be conducted in an as-is-condition.

309.4 A person who conducts performance or reverification tests shall comply with all of the following:

- a. Conduct tests in accordance with the applicable test methods specified in Section 600 and other CARB testing procedures. Tests shall be conducted using calibrated equipment meeting the calibration range and calibration intervals specified by the manufacturer.
- b. Provide notification to the District at least 3 days prior to testing except for reverification tests conducted after a driveoff, provided that the person conducting the tests complies with all other applicable provisions of the rule.
- c. Conduct the tests any time Monday through Friday from 9:00 a.m. through 4:00 p.m.
- d. Submit a copy of the test report in 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.

309.5 Notwithstanding Section 309.4.b, the owner/operator 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 at least 12 hours prior to retesting; or
- b. When all necessary repairs are performed during the same day the facility has failed , 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 Sections 502.2 and 502.3.

309.6 The owner/operator shall not operate or resume operation of a gasoline 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 APCO pursuant Section 502.3.

310 **PROHIBITION OF USE:** Whenever the Air Pollution Control Officer determines that a Phase II vapor recovery system, or any component thereof, contains a defect specified by the California Air Resources Board pursuant to Section 41960.2(c) of the California Health and Safety Code, the Air Pollution Control Officer shall mark such a system or component "Out of Order." No person shall use or permit the use of such marked component or system until it has been repaired, replaced, or adjusted, as necessary, and the APCO has reinspected it or has authorized its use pending reinspection.

311 **POSTING OF OPERATING INSTRUCTIONS:** The owner/operator of each retail gasoline dispensing facility utilizing a Phase II system shall conspicuously post operating instructions for the system in the gasoline dispensing area. The instructions shall clearly describe how to fuel motor vehicles correctly with vapor recovery nozzles, and shall include a warning that topping off may result in

spillage or recirculation of gasoline and is prohibited. Additionally the instructions shall include prominent display of the Yolo-Solano Air Quality Management District's or the California Air Resources Board's toll free telephone number for complaints. A dispenser that is never used to fuel motor vehicles shall have a sign posted on it restricting its use for motor vehicles. All required signs shall conform to the following:

- 311.1 Each decal sign shall be visible from all fueling positions it serves that shall be readable from a distance of at least 3 feet.
- 311.2 Each pump toppers shall be equipped with one double-back sign per island; each dispenser shall be equipped with two permanent (non-decal) signs, two single-sided or one double-sided sign(s); and all signs shall be readable from a distance of at least 6 feet.

400 ADMINISTRATIVE REQUIREMENTS

401 **COMPLIANCE SCHEDULE:** The owner/operator of any gasoline dispensing facility shall comply with the applicable provisions of this rule in accordance with the following schedule:

- 401.1 If required, by December 12, 2002, submit an application for Authority to Construct to the Air Pollution Control Officer and by December 12, 2003, be in final compliance with this rule.

402 **VIOLATIONS:** Any equipment subject to the provisions of this rule that fails to meet the requirements contained in Section 305 shall be tagged "Out of Order." Such failures shall constitute a violation of this rule. Except during repair activity, the "Out of Order" tag shall not be removed and the tagged equipment shall not be used, permitted to be used, or provided for use unless all of the following conditions are met:

- 402.1 The tagged equipment has been repaired, replaced, or adjusted, as necessary;
- 402.2 The District has been notified of the repairs by completing and signing the form supplied by the District; and

402.3 The tagged equipment has be reinspected and/or authorized for use by the APCO.

Failure of any of the test methods specified in Section 600 shall constitute a violation of this rule.

500 MONITORING AND RECORDS

501 **PREVENTATIVE MAINTENANCE PROGRAM:** No later than September 12, 2002, the owner/operator of each gasoline dispensing facility shall implement a maintenance program and document the program in a preventative maintenance (PM) manual for the Phase II vapor recovery system. The PM manual shall be kept at the facility and made available to any person who operates, inspects, maintains, repairs, or tests any part of the vapor recovery system. The PM manual shall be made available to District personnel upon request. The PM manual shall contain detailed instructions to assure proper operation and maintenance of the vapor recovery system and its components. The PM manual shall include the following current information:

501.1 A copy of all applicable CARB Executive Orders, Approval Letters, and valid District Permits.

501.2 A copy of the manufacturer's specifications and instructions for installation, operation, repair and maintenance required pursuant to CARB Certification Procedure CP-201, Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities, and any additional instructions provided by the manufacturer.

501.3 System and/or component testing requirements, including test schedules and passing criteria for each of the standard tests specified in Section 600. The owner/operator may include any non-CARB required diagnostic and other tests as part of the testing requirements.

501.4 Additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, CARB Executive Orders and District Permit to Operate

conditions, including replacement schedules for failure or wear prone components.

502 **RECORD KEEPING:** A person who performs self-compliance inspections, repairs or testing at any gasoline 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 shall maintain all records listed below on site and any other test results or maintenance records that are required to demonstrate compliance for a period of at least 2 years. Records for non-retail gasoline dispensing facilities that are unmanned may be kept off site provided that the records are made available to District personnel within 72 hours. All records required by this section shall be made available to the District personnel upon request both on site during inspections and offsite as specified.

502.1 Records of all defective components identified or repaired during self-compliance inspections.

502.2 Repair logs shall include at a minimum:

- a. Date and time of repair.
- b. The name of the person(s) who performed the repair, and if applicable, the name, address and phone 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.
- e. Each component that was installed as replacement, if applicable, including the required component identification information.
- 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.

502.3 Records of tests, which shall include:

- a. Date and time of each test.

- b. Name, affiliation, address and phone number of the person(s) who performed the test.
- c. Test data and calibration data for all equipment used.
- d. 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.
- e. For a retest following a failed performance or reverification test, description of repairs performed.
- f. Copies of the test reports in District-approved format.

600 TEST METHODS AND PROCEDURES: A result by any of the test methods or test procedures listed below, or any amendments and successors thereto, which shows non-compliance with any provision of this rule shall constitute a violation of this rule.

601 **STATIC PRESSURE DECAY:** The static pressure performance tests of a Phase I or Phase II vapor recovery system for underground and above ground tanks shall be determined in accordance with CARB Test Procedure TP-201.3 and TP-201.3B, as applicable.

602 **DYNAMIC PRESSURE:** The dynamic pressure performance of a Phase II vapor recovery system shall be determined in accordance with CARB Test Procedure TP-201.4.

603 **AIR-TO-LIQUID RATIO:** The air-to-liquid volume ratio of a Phase II vapor recovery system shall be determined in accordance with CARB Test Procedure TP-201.5.

604 **LIQUID REMOVAL RATE:** The liquid removal rate of a Phase II vapor recovery system shall be determined in accordance with CARB Test Procedure TP-201.6.

605 **STORAGE TANK MANIFOLD:** The manifold of the underground storage tanks shall meet CARB tank tie tests requirements in accordance with CARB Test Procedure TP-201.3C.

606 **VAPOR TIGHT CONDITION:** The vapor tight condition shall be determined in accordance with EPA Method 21, using a portable hydrocarbon analyzer calibrated with methane.