

TITLE 26 - DEPARTMENT OF THE ENVIRONMENT

SUBTITLE 11 - AIR QUALITY

Chapter 24 Stage II Vapor Recovery at Gasoline Dispensing Facilities

.01 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Approved Stage II vapor recovery system (approved system)" means:

(a) A properly installed Stage II vapor recovery system for which CARB issued an Executive Order certifying the system using procedures in effect in California before April 1, 2001; or

(b) A system approved by the Department that involves certification procedures comparable to or similar to the certification procedures used by CARB and in effect in California before April 1, 2001.

(2) "CARB" means the California Air Resources Board.

(2-1) "Certified Inspector" means an inspector that has been trained and certified in the Department's requirements for gasoline storage tanks and vapor recovery systems in accordance with COMAR 26.10.06.04.

(3) "Defective equipment" means the absence, disconnection, or malfunctioning of an approved system or part of an approved system, including:

(a) A vapor return line that is crimped, flattened, blocked, or that has any hole or slit from which vapors may leak;

(b) A nozzle bellows that has any hole through which a 1/4 inch diameter cylindrical rod will pass, or any slit 1 inch or more in length;

(c) A nozzle faceplate or facecone that has 25 percent or more of its surface torn or missing;

(d) A nozzle without an automatic overfill control mechanism or with an inoperable overfill control mechanism;

(e) A nozzle without a vapor check valve or with a malfunctioning vapor check valve;

(f) Any underground equipment that is not vapor tight or any equipment that has obstructions prohibiting the flow of vapor; and

(g) A missing, inoperable, or malfunctioning vapor processing unit, vacuum generating device, pressure or vacuum relief valve, vapor check valve, or any other component of an approved system.

(4) "Existing gasoline dispensing facility" means any gasoline dispensing facility that is not a "new gasoline dispensing facility" as defined in this regulation.

(5) "Facecone" means a component of a nozzle, located at the end of the flexible cone, that allows gasoline vapors to be collected.

(6) "Faceplate" means a component of a nozzle, located at the end of the nozzle bellows, that provides the vapor seal when gasoline is dispensed into a motor vehicle.

(7) "Gasoline dispensing facility" means a site with equipment that is used to transfer gasoline from one or more stationary storage tanks into motor vehicle fuel tanks.

(8) "Independent small business gasoline marketer" means an independent small business marketer of gasoline, as defined in Sec. 324 (Vapor Recovery for Small Business Marketers of Petroleum Products) of the Federal Clean Air Act.

(9) "Monthly gasoline throughput" means the average monthly amount of gasoline dispensed at a gasoline dispensing facility excluding any time period when the facility was shut down.

(9-1) "Motor vehicle" means a vehicle registered with the Maryland Motor Vehicle Administration or the equivalent agency of another state.

(10) "New gasoline dispensing facility" means a gasoline dispensing facility for which the Department issued or issues a permit to construct after November 15, 1990, except for a gasoline dispensing facility at which only the gasoline storage tanks were or are replaced.

(11) "Nozzle" means the spout at the end of the gasoline hose used to dispense and control the flow of gasoline from a stationary gasoline storage tank into motor vehicle fuel tanks.

(12) "Nozzle bellows" means a flexible component of a nozzle that is compressed to establish a seal between the nozzle faceplate and filler neck of the motor vehicle fuel tank.

(13) "Operator" means a dealer or other person who is responsible for the daily operation and maintenance of a gasoline dispensing facility and who is subject to the inspection, training, and reporting requirements of this chapter.

(14) "Owner" means the person who owns a gasoline dispensing facility and who is responsible for the installation requirements, initial compliance, and periodic testing of an approved system.

(15) "Stage II vapor recovery system" means a system at a gasoline dispensing facility that is designed, installed, and used to collect, recover, or destroy gasoline vapors displaced when gasoline is dispensed from a stationary gasoline storage tank into motor vehicle fuel tanks.

(16) "Tag out of service" means to place out of service by use of a conspicuously located tag or sign on a nozzle that prohibits the use of any nozzle associated with defective equipment.

(17) "Vapor assist system-Type 1" means a Stage II vapor recovery system that uses:

(a) A mechanical device and the flow of gasoline to generate a vacuum, the magnitude of which is related to the volume of gasoline; or

(b) An electromechanical device which collects gasoline vapors displaced when gasoline is dispensed from a stationary storage tank into motor vehicle fuel tanks.

(18) "Vapor assist system-Type 2" means a Stage II vapor recovery system that provides vacuum from a centrally located pump for all gasoline dispensers at the facility and is initiated by a trigger in the nozzle. This system is referred to as the "Healy System".

(19) "Vapor balance system" means a Stage II vapor recovery system that uses the pressure generated in a vehicle tank by incoming fuel and the negative pressure in the gasoline storage tank to recover vapors displaced when gasoline is dispensed from a stationary storage tank into motor vehicle fuel tanks.

(20) "Vapor recovery system" means a Stage II vapor recovery system at a gasoline dispensing facility and a Stage I vapor recovery system on a gasoline storage tank.

.01-1 Incorporation by Reference.

A. In this chapter, the following CARB approved test methods are incorporated by reference.

B. Test Methods Incorporated.

(1) Vapor Recovery Test Procedure TP-201.3 Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, amended March 17, 1999;

(2) Vapor Recovery Test Procedure TP-201.5 Determination (By Volume Meter) of Air to Liquid Volume Ratio of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996;

(3) Vapor Recovery Test Procedures TP-201.4 Determination of Dynamic Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, amended April 28, 2000;

(4) Executive Order G-70-186, Exhibit 4, Vapor Return Line Vacuum Integrity Test for the Healy Model 400 ORVR System; and

(5) Executive Order G-70-165, Exhibit 4, Vapor Return Line Vacuum Integrity Test for the Healy Model 600 System.

.02 Applicability, Exemptions, and Effective Date.

A. This chapter applies in Baltimore City and Anne Arundel, Baltimore, Calvert, Carroll, Cecil, Charles, Frederick, Harford, Howard, Montgomery, and Prince George's counties.

B. A gasoline dispensing facility exempted under Sec. C of this regulation is subject only to the record-keeping and reporting requirements of Regulation .07D of this chapter.

C. The provisions of this chapter do not apply to:

(1) The owner or operator of an existing gasoline dispensing facility whose average monthly gasoline throughput during calendar years 1990 and 1991 was less than 10,000 gallons;

(2) The owner or operator of any new gasoline dispensing facility that has a total gasoline storage tank capacity of less than 2,000 gallons; or

(3) An existing independent small business gasoline marketer whose average monthly gasoline throughput during calendar years 1990 and 1991 was less than 50,000 gallons.

D. If a person purchases a gasoline dispensing facility equipped with an approved system, the new owner or operator shall continue to operate the approved system unless the average monthly gasoline throughput during any calendar year after the purchase is less than 10,000 gallons.

E. If a person purchases a gasoline dispensing facility that exceeded the 1990-1991 applicability thresholds in § C of this regulation but was not equipped with an approved system, the new owner or operator shall install an approved system if the average monthly gasoline throughput for the calendar year before the purchase exceeded 10,000 gallons or 50,000 gallons per month as applicable.

F. An owner or operator of a gasoline dispensing facility shall install and operate an approved system within 1 year after any calendar year in which the average monthly gasoline throughput at the facility during the calendar year exceeds 50,000 gallons per month for existing independent small business gasoline marketers, or 10,000 gallons per month for other existing gasoline dispensing facilities. The owner and operator of these facilities are subject to all applicable requirements of this chapter.

.03 General Requirements

A. New Gasoline Dispensing Facilities. After May 15, 1993, an owner or operator of a new gasoline dispensing facility may not operate the gasoline dispensing facility unless it is equipped and operated with an approved system.

B. Existing Gasoline Dispensing Facilities. Except as provided in Sec. C of this regulation, an owner or operator of an existing gasoline dispensing facility may not operate that gasoline dispensing facility after the following dates, unless it is equipped and operated with an approved system:

(1) November 15, 1993, if the monthly gasoline throughput during calendar years 1990 and 1991 was 100,000 gallons or more; or

(2) November 15, 1994, if the monthly gasoline throughput during calendar years 1990 and 1991 was less than 100,000 gallons.

C. Existing Independent Small Business Gasoline Marketers. After the dates listed below, an existing independent small business gasoline marketer may not operate a gasoline dispensing facility unless it is equipped and operated with an approved system:

(1) November 15, 1994, for an independent small business gasoline marketer with one or two facilities; or

(2) November 15, 1995, for an independent small business gasoline marketer with three or more facilities, if at least 1/3 of the facilities are equipped and operated with an approved system by November 15, 1993 and at least 2/3 of the facilities are equipped and operated with an approved system by November 15, 1994.

D. If an owner of an existing gasoline dispensing facility subject to this chapter replaces a gasoline storage tank after November 15, 1990, the owner shall install all underground piping required by this chapter and perform a leak and liquid blockage test.

E. After the applicable dates established in Sec. A--C of this regulation, an operator may not use or allow the use of defective equipment associated with the transfer of gasoline from a stationary gasoline storage tank to motor vehicle fuel tanks.

F. The operator may not install or use a replacement part in an approved system unless that part has been certified by CARB or approved by the Department for the approved system.

G. The owner shall ensure that all underground piping is installed in accordance with the Department's requirements related to underground storage tanks, which are set forth in COMAR 26.10.03.

H. Gasoline storage tanks serving a gasoline dispensing facility that is subject to this chapter shall be equipped with a properly designed and installed pressure and vacuum valve with minimum pressure and vacuum settings as specified in the CARB Executive Order for that system.

I. If an approved system is certified under more than one Executive Order, the most recent Executive Order shall apply.

.04 Testing Requirements.

A. Except as provided in §§F and G of this regulation, an owner subject to this chapter shall perform the following CARB-approved tests:

(1) A leak test in accordance with the Vapor Recovery Test Procedure TP-204.3 referenced in Regulation .01-1B(1) of this chapter;

(2) An air to liquid volume ratio test in accordance with the Vapor Recovery Test Procedure TP-201.5 referenced in Regulation .01-1B(2) of this chapter.

(3) A dynamic pressure performance test in accordance with the Vapor Recovery Test Procedure TP-201.4 referenced in Regulation .01-1B(3) of this chapter;

(4) A vapor return line vacuum integrity test for the Healy Model 400 ORVR System in accordance with Executive Order G-70-186, Exhibit 4 referenced in Regulation .01-1B(4) of this chapter; and

(5) A vapor return line vacuum integrity test for the Healy Model 600 System in accordance with Executive Order G-70-165 Exhibit 4 referenced in Regulation .01-1B(5) of this chapter.

B. The leak and liquid blockage tests required in §A of this regulation shall be performed on each approved system before the gasoline dispensing facility is initially used to refuel motor

vehicles, or by the applicable dates in Regulation .03 of this chapter, whichever occurs later.

C. Stage II Vapor Recovery System.

(1) An owner of a Stage II vapor recovery system subject to this chapter shall repeat the required tests:

- (a) In accordance with the test schedule in §C(2) of this regulation; and
- (b) Upon replacement of 75 percent or more of an approved system.

(2) Test Schedule.

Type of Stage II Vapor Recovery System	Initial Test	Frequency of Retest
(a) Vapor Balance System	Dynamic Back Pressure Leak Test Liquid Blockage Test	12 months 12 months 5 years
(b) Vapor Assist System-Type 1	Air to Liquid Ratio Test Leak Test Liquid Blockage Test	12 months 12 months 5 years
(c) Vapor Assist System-Type 2 Model 400	Nozzle Regulation Test Vapor Return Leak Tightness Test Liquid Blockage Test	12 months 12 months 5 years
(d) Vapor Assist System-Type 2 Model 600	Air to Liquid Ratio Test Vapor Return Line Vacuum Integrity Test Liquid Blockage Test	12 months 12 months 5 years

D. An owner shall test the automatic shutoff and flow prohibiting mechanisms upon installation and at least monthly after that to ensure they operate properly.

E. If a gasoline dispensing facility fails any test required by this chapter, the owner shall notify the Department of the failure in writing within 5 working days after the test and before retesting.

F. Alternative test methods approved by CARB may be used in place of the test methods specified in § A of this regulation, if the alternative test methods are approved by the U.S. Environmental Protection Agency (EPA) as a revision to the State Implementation Plan, which is Maryland's plan for meeting the National Ambient Air Quality Standards.

G. Test methods and the frequency of testing required by this regulation may be modified for vapor assist systems, if the test methods and testing frequency are approved by the Department and the EPA.

.05 Inspection Requirements.

A. An operator subject to this chapter shall ensure that each approved system is inspected at least once each day of operation to verify that it is working properly.

B. Except as provided in Sec. C of this regulation, the Department shall consider an operator of a gasoline dispensing facility to be in violation of Regulation .03E of this chapter during any period of time that the facility is operated while there is defective equipment at the facility.

C. The operator is not in violation of Regulation .03E of this chapter during any period of time for which the operator establishes, to the satisfaction of the Department, that nozzles associated with defective equipment were tagged out of service and that no nozzle associated with the defective equipment was actually used.

D. For defective equipment that was identified by the Department, the operator shall inform the Department by telephone within 72 hours after the repair or replacement of the defective equipment.

.05-1 Inspection by a Certified Inspector.

A. Operator Requirements.

(1) A person that operates a gasoline dispensing facility or a gasoline storage tank with a vapor recovery system shall ensure that a certified inspector perform an inspection of each vapor recovery system.

(2) Each vapor recovery system shall be inspected by a certified inspector in accordance with the schedules set forth in COMAR 26.10.03.10.

B. Inspection Requirements.

(1) The certified inspector shall inspect each vapor recovery system to confirm that:

- (a) All the necessary equipment has been installed;
- (b) The equipment is functioning properly; and
- (c) There is no defective equipment in use.

(2) The certified inspector shall review the facility files to confirm that:

- (a) All testing required by this chapter has been completed;
- (b) The operator has performed daily inspections of the Stage II equipment;
- (c) The records required by this chapter are complete and maintained onsite; and
- (d) All other requirements of this chapter are being met.

(3) The certified inspector shall complete an inspection form provided by the Department and submit the completed form to the Department within 30 days after completing the inspection.

.06 Training Requirements for Operation and Maintenance of Approved Systems.

A. General. An operator shall ensure that:

(1) At least one employee at each facility subject to this regulation is trained in accordance with the requirements of Sec. B of this regulation; and

(2) The trained employee assists in the training of each of the other employees at that facility who are involved in the operation or maintenance of the approved system.

B. Approved Training Course Contents and Duration.

following: (1) An approved training course shall contain, at a minimum, a discussion of the

- (a) Purposes and effects of Stage II vapor recovery;
- (b) Stage II vapor recovery equipment design, function, operation, and maintenance;
- (c) Daily inspection requirements and development and maintenance of records and files; and
- (d) Equipment warranties and spare parts.

(2) The approved training course shall be of a duration sufficient to properly train persons in the requirements of this chapter.

.07 Record-Keeping and Reporting Requirements.

A. An operator subject to this chapter shall create and maintain a record file at the facility.

B. The record file shall contain copies of all test reports, permits, violation notices, correspondence with the Department, equipment maintenance records, training records, and other information pertinent to the requirements of this chapter. Verification of training shall be maintained in the facility file. Equipment maintenance records required under this chapter shall be maintained for at least 2 years. All other records shall be maintained for at least 5 years.

C. The equipment maintenance records shall include:

(1) The date on which defective equipment was found, a description of each defect, a description of the corrective action and the date on which the defect was corrected, and the probable cause of the defect;

(2) If parts are replaced, the location within the approved system of the part, the part number, and assurance that the replacement part does not degrade the efficiency of the system; and

(3) Inspection reports and any other information relating to maintenance or care of the approved system.

D. An owner or operator of a gasoline dispensing facility exempted according to Regulation .02C of this chapter shall create and maintain records on gasoline throughput and tank sizes and make the records available to the Department on request.

E. The following reporting requirements apply to a test under this chapter:

(1) The Department shall be notified 21 days before a test is to be conducted;

(2) A test protocol shall be available at the test site during testing;

(3) Copies of all test results shall be forwarded to the Department; and

(4) Test failures shall be reported to the Department in writing within 5 days following the date of the failure.

.08 Instructional Signs.

A. An operator who is subject to this chapter shall place instructional signs in conspicuous locations at each gasoline dispenser.

B. The instructional signs shall include:

(1) Instructions, with illustrations, on how to insert the nozzle, dispense gasoline, and how to remove the nozzle;

(2) A warning against attempts to continue refueling after automatic shut-off of the gasoline (that is, topping off); and

(3) The Department's toll-free telephone number which may be used for complaints or comments concerning the use of Stage II vapor recovery systems.

.09 Sanctions.

A. A person who violates any provision of this chapter is subject to the sanctions set forth in Environment Article, Title 2, Annotated Code of Maryland. Each day of violation constitutes a separate violation. These sanctions in the Annotated Code of Maryland include:

(1) Injunctive relief under Environment Article, Sec. 2-609;

(2) Judicial penalties up to \$25,000 per violation under Environment Article, Sec. 2-610;

(3) Administrative penalties up to \$2,500 per violation, limited to \$50,000 per administrative action, under Environment Article, Sec. 2-610.1; and

(4) Criminal penalties for knowing violations under Environment Article, Sec. 2-609.1.

B. After this chapter is approved by EPA as an amendment to the State Implementation Plan, a person who violates any provision of this chapter may be subject to federal enforcement action.

[SIP effective date: July 7, 2003. Regulation .01 is revised and Regulation .05-1 is added; the SIP effective date is March 17, 2003.]