STATE OF CONNECTICUT Regulation of Environmental Protection

Section 22a-174-30. Dispensing of Gasoline/Stage I and Stage II Vapor Recovery.

(a) **Definitions.** For the purposes of this section:

(1) "CARB" means the State of California Air Resources Board.

(2) "CARB-certified fill adapter" means a specialized fitting on a stationary gasoline storage tank that prevents the loosening or overtightening of the connecting line between an entry port of a gasoline fill pipe and the fill line from a gasoline delivery vehicle.

(3) "Dispensing facility" means any site where gasoline is transferred to motor vehicles from any stationary storage tank with a capacity of 250 gallons or more.

(4) "Gasoline" means any petroleum distillate or blend of petroleum distillate and alcohol having a reid vapor pressure of four pounds per square inch or greater and used as a fuel for internal combustion engines.

(5) "Major system modification" means, notwithstanding any definition in section 22a-174-1 of the Regulations of Connecticut State Agencies:

(A) The repair or replacement of any stationary storage tank equipped with a Stage II vapor recovery system;

(B) The repair or replacement of any part of an underground piping system attached to a stationary storage tank equipped with a Stage II vapor recovery system, excluding the repair or replacement of any part of an underground piping system that is accessible for such repair or replacement without excavation;

(C) The replacement of a vapor balance Stage II vapor recovery system with a vacuum assist Stage II vapor recovery system; or

(D) The replacement of a vacuum assist Stage II vapor recovery system

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with a vapor balance Stage II vapor recovery system.

(6) "Owner or Operator" means any person who owns, leases, operates or controls a dispensing facility subject to this section.

(7) "Reid vapor pressure" or "RVP" means the vapor pressure of a liquid in pounds per square inch absolute at one hundred (100) degrees Fahrenheit as determined by American Society for Testing and Materials (ASTM) method D5191-01.

(8) "Stage I vapor recovery system" means a vapor recovery system that prevents the discharge to the atmosphere of gasoline vapors while gasoline is transferred between a delivery vehicle and a dispensing facility in accordance with the provisions of section 22a-174-20(a) of the Regulations of Connecticut State Agencies.

(9) "Stage II vapor recovery system" or "system" means a vapor recovery system that prevents the discharge to the atmosphere of at least ninety-five percent (95%) by weight of gasoline vapors displaced during the dispensing of gasoline into a motor vehicle fuel tank.

(10) "Throughput" means the number of gallons of gasoline delivered into motor vehicles through all equipment at a dispensing facility over a specified period of time.

(11) "Two-point Stage I vapor recovery system" means a stationary storage tank possessing an entry port for a gasoline fill pipe and an exit port for a vapor connection that seals when the vapor return connection is disconnected in a manner that will prevent the discharge of gasoline vapors to the atmoshpere.

(12) "Vacuum assist Stage II vapor recovery system" means a stage II vapor recovery system that uses a vacuum-generating device to draw gasoline vapors from a motor vehicle's gasoline fuel tank during the dispensing of gasoline into such tank.

(b) Regulated dispensing facilities.

(1) On or after November 30, 1992, any owner or operator of a dispensing facility shall install a Stage II vapor recovery system if such facility begins actual construction of a stationary storage tank of any size and such facility has a throughput of ten thousand (10,000) gallons or more during any calendar month. No such person shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at such facility on or after November 30, 1992 unless a properly

operating Stage II vapor recovery system is used for such transfer.

(2) After May 15, 1993, no owner or operator of a dispensing facility for which construction commenced between November 15, 1990 and November 30, 1992 and which has a throughput of ten thousand (10,000) gallons or more during any calendar month shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at such dispensing facility unless a properly operating Stage II vapor recovery system is used for such transfer.

(3) After November 15, 1993, no owner or operator of a dispensing facility which existed, or for which construction commenced, on or before November 15, 1990 and which has a monthly throughput of one hundred thousand (100,000) gallons or more shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at such dispensing facility unless a properly operating Stage II vapor recovery system is used for such transfer. Such monthly throughput shall be calculated based on the highest throughput in a calendar month during the two-year period between November 30, 1990 and November 30, 1992. If such a dispensing facility was inactive for any period during the two-year period, such period shall be extended to include a total of twenty-four months of activity.

(4) After November 15, 1994, no owner or operator of a dispensing facility which existed or for which construction commenced on or before November 15, 1990 and which has a throughput of ten thousand (10,000) gallons or more during any calendar month after November 30, 1992 shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at such dispensing facility unless a properly operating Stage II vapor recovery system is used for such transfer.

(5) After a dispensing facility becomes subject to subdivision (1), (2), (3) or (4) of this subsection, the requirements of such subdivision shall always apply to such dispensing facility.

(6) Any owner or operator of a dispensing facility which is not subject to subdivision (1), (2), (3) or (4) of this subsection shall maintain at such dispensing facility records of monthly throughput which demonstrate such a dispensing facility is not subject to subdivision (1), (2), (3) or (4) of this subsection. Such records shall be kept for five (5) years and shall be made available for inspection by a representative of the Department or EPA.

(c) Equipment specifications.

(1) No person shall install a Stage II vapor recovery system at a dispensing facility unless:

(A) Such system is or has ever been tested and approved by CARB; or

(B) Such system is or has ever been tested and approved by another state using testing methods approved by CARB; and

(C) Such system utilizes only coaxial hoses.

(2) No person shall replace any part of a Stage II vapor recovery system with a new or rebuilt part unless such new or rebuilt part is or has ever been approved for installation in such Stage II vapor recovery system either by CARB or by another state using testing methods approved by CARB.

(3) No person shall modify, remove, replace, add or otherwise render inoperative any part of a Stage II vapor recovery system in such a way that the system becomes incapable of preventing discharge to the atmosphere of at least ninety-five percent (95%) by weight of gasoline vapors displaced during the dispensing of gasoline.

(4) Each Stage II vapor recovery system shall conform to the applicable specifications of the National Fire Protection Association Automobile and Marine Service Station Code set forth in section 29-320-3a of the Regulations of Connecticut State Agencies.

(5) Any owner or operator of a dispensing facility subject to subsection (b) of this section shall install and maintain the Stage II vapor recovery system in a manner such that the dispensing facility complies with the provisions of sections 22a-449(d)-1 and 22a-449(d)-101 through 22a-449(d)-113 of the Regulations of Connecticut State Agencies.

(6) Unless otherwise specified in an applicable CARB certification, one year after the effective date of this section, no owner or operator of a dispensing facility subject to subsection (b) of this section shall transfer or allow the transfer of gasoline between a delivery vehicle and a stationary storage tank at such facility unless each stationary storage tank is equipped with:

(A) A CARB-certified fill adapter; and

(B) A pressure-vacuum vent valve with a relief setting of three (3), plus or minus one-half (0.5) inch of water column pressure and eight (8), plus or minus two (2.0) inches of water column vacuum.

(7) Two-point Stage I vapor recovery systems shall be installed:

(A) By an owner or operator of any stationary storage tank with an available port one year after the effective date of this section; and

(B) By an owner or operator of any stationary storage tank that does not have an available port at such time the stationary storage tank is replaced or at such time the product in the tank is switched from any other fuel to gasoline.

(d) Training, maintenance, and labeling.

(1) Any owner or operator of a dispensing facility subject to subsection (b) of this section shall require that at least one representative of such dispensing facility attends and successfully completes a training session provided by a Stage II equipment manufacturer, supplier, distributor or installer in the operation and maintenance of the Stage II vapor recovery system used at the facility where such representative is employed. If an owner or operator owns or operates more than one dispensing facility that utilizes the same type of Stage II vapor recovery system, only one representative from one of the dispensing facilities must be trained in accordance with this subsection. Training shall be successfully completed no later than three (3) months after commencement of operation of the dispensing facility's Stage II vapor recovery system, or, if a representative is responsible for more than one facility that utilizes the same type of Stage II vapor recovery system, such training shall successfully be completed no later than three (3) months after the first installation of such Stage II vapor recovery system. If the representative who received the training is no longer employed at that dispensing facility, another representative of such dispensing facility shall attend and successfully complete the training within three (3) months of the departure of such representative who had previously received the training. Training shall include the following areas:

(A) Purposes and effects of the Stage II vapor recovery system;

(B) Operation of the dispensing facility's Stage II vapor recovery system;

(C) Maintenance schedules for the dispensing facility's Stage II vapor recovery system;

(D) Manufacturer's warranties for the dispensing facility's Stage II vapor recovery system; and

(E) Equipment manufacturer contacts (names, addresses, and phone numbers) for parts and service necessary for the proper operation of the dispensing facility's Stage II vapor recovery system.

(2) Any owner or operator of a dispensing facility subject to subsection (b) of this section shall maintain the Stage II vapor recovery system in accordance with specifications that are or have ever been approved by CARB.

(3) Any owner or operator of a dispensing facility subject to subsection (b) of this section shall post, conspicuously on the upper two-thirds of each gasoline dispenser, operating instructions for dispensing gasoline using the Stage II vapor recovery system. Such instructions shall include, at a minimum, the following:

(A) A clear description of how to correctly dispense gasoline using the Stage II vapor recovery system;

(B) A warning not to attempt to continue dispensing gasoline after automatic shutoff of the nozzle; and

(C) A telephone number, 1-800-249-1234, to contact the Department to report problems experienced with the Stage II vapor recovery system.

(e) Testing.

(1) The owner or operator of a dispensing facility subject to subsection (b) of this section shall conduct an initial performance test prior to dispensing any gasoline into a motor vehicle fuel tank to verify that the Stage II vapor recovery system has been properly installed and is functioning properly. Such tests shall be conducted in accordance with the test procedures in the EPA document "Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities", Vol II (EPA-450/3-91-022b)and shall also include:

(A) Liquid blockage testing;

(B) Pressure decay/leak check testing, except that the AMOCO V-1 Phase II vapor recovery system approved pursuant to CARB Executive Order G-70-118-AB shall be tested using the CARB-approved pressure decay/leak check test methods set forth in TP-201.3A, "Determination of 5 inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities;"

(C) Automatic shutoff mechanism testing in accordance with test procedures set forth in CARB Examination Procedures Outline 26-F-1, "Vapor Recovery Systems Field Compliance Testing Procedures;"

(D) Any other related testing of flow prohibiting mechanisms at the gasoline dispenser;

(E) Pressure-vacuum vent valve testing to verify operation within 0.29 ounces per square inch or 0.5 inches water column of the designed pressure and within 1.2 ounces per square inch or 2 inches water column of the vacuum settings; and

(F) Vacuum assist Stage II vapor recovery system testing using the CARB Air-to-Liquid Volume Ratio Test Procedure set forth in TP-201.5.

(2) At least every five years and after November 15, 2004 every three years or upon major system modification, whichever occurs first, an owner or operator of a dispensing facility shall conduct testing to verify that the Stage II vapor recovery system is operating properly. Such testing shall include a leak check test and any and all other functional tests that were required by subdivision (1) of this subsection. Minor excavation conducted solely for the purpose of complying with the requirements of subsections (c)(6) and (c)(7) shall not, by itself, trigger the requirement to test pursuant to this subdivision.

(3) Before a person conducts a test pursuant to this subsection, the owner or operator of the dispensing facility shall notify the Department's Bureau of Air Management at least seven (7) days in advance of such testing. Such notification shall include the date, time and location of the test(s), and the name and address of the person conducting the test(s). The owner or operator is not required to submit such notice if a representative of the Department will conduct such test.

(4) If any Stage II vapor recovery system does not pass any test required by this subsection, the State II vapor recovery system shall be considered to not be operating properly.

(f) Record keeping requirements.

(1) Any owner or operator of a dispensing facility subject to subsection (b) of this section shall maintain, in a location in the State of Connecticut, the following records:

(A) All licenses, as that term is defined in section 4-166 of the Connecticut General Statutes, to construct or operate the dispensing facility or to construct or operate a specific system at the dispensing facility;

(B) All records and results of tests performed pursuant to subsection (e) of this section, including the date of the testing and the names, addresses, and phone numbers of the persons who performed the tests;

(C) A record of any maintenance or repair conducted on any part of the

Stage II vapor recovery system, including a description of the maintenance problem, identification of any part or parts repaired or replaced on such Stage II vapor recovery system, the date such part or parts were repaired or replaced, and a general description of the location of the part or parts in the system including the number of the gasoline dispenser;

(D) Proof that a current representative of the dispensing facility received training pursuant to subsection (d) of this section;

(E) A chronological file of all inspection reports of the dispensing facility issued by a representative of the Department, the Department of Consumer Protection or EPA; and

(F) A chronological file of all compliance records, including orders, warnings and notices of violations, issued by a representative of the Department, the Department of Consumer Protection or EPA.

(2) Records required by this subsection shall be made available for inspection and copying by a representative of the Department, EPA or the Department of Consumer Protection.

(3) Records shall be maintained for five (5) years from the date of creation.

(4) An owner or operator shall display in a conspicuous location at the dispensing facility the address in the state of Connecticut at which the records required by subdivision (1) of this subsection are maintained.

(g) Defective equipment.

(1) Any Stage II vapor recovery system having a defect, as defined by subdivision
(3) of this subsection, shall be immediately tagged "out of order" by the owner or operator of the dispensing facility.

(2) An owner or operator of a dispensing facility shall not allow the use of a Stage II vapor recovery system which has been tagged "out of order" until such system has been repaired or replaced.

(3) For the purposes of subdivisions (1) and (2) of this subsection, a defect in a Stage II vapor recovery system shall include, but shall not be limited to:

(A) Absence or disconnection of any part required to be used in such Stage II vapor recovery system;

(B) A vapor recovery hose which is crimped, flattened or otherwise impaired, such that the vapor passage is blocked, or when a pressure drop through the vapor recovery hose that exceeds by a factor of two (2) or more the CARB specifications for such Stage II vapor recovery system;

(C) A nozzle boot which has any rip, tear or perforation in the area of the check valve; a triangular-shaped or similar tear one-half (1/2) inch or more to a side; a hole one-half (1/2) inch or more in diameter; or a slit one (1) inch or more in length;

(D) Balance nozzles and nozzles for aspirator and educator assist-type systems which are damaged such that the capability to achieve a seal with a fill pipe interface is affected for one-quarter of the circumference of the faceplate (accumulated);

(E) Nozzles for vacuum assist systems which are damaged such that an area of the vapor guard equal to or greater than one-half (0.5) inch in area is missing;

(F) A nozzle shutoff mechanism that malfunctions in any manner;

(G) A vapor return line, including such parts as swivels, anti-recirculation valves and underground piping, which malfunctions or is blocked or restricted such that the pressure drop through the line exceeds by a factor of two or more the requirements for such Stage II vapor recovery system;

(H) A vapor processing unit which is inoperative;

(I) A vacuum producing device which is inoperative; or

(J) A pressure/vacuum relief valve, vapor check valve, or dry break which is inoperative.

(h) Delegation.

(1) The commissioner may, in accordance with the provisions of section 22a-2a of the Connecticut General Statutes, delegate the authority to inspect any dispensing facility covered by the provisions of this section to the Department of Consumer Protection or to any employee of the Department of Consumer Protection. Such delegation shall not include the authority to otherwise enforce any provision of this section.

(2) The commissioner shall implement such delegation of authority by

memorandum of understanding. The memorandum of understanding shall include an effective date and an expiration date, provided that the initial memorandum of understanding shall be valid for a period of up to three (3) years.

(3) Prior to the expiration of the memorandum of understanding, the commissioner shall review the performance of duties required by the memorandum of understanding, including record keeping, reporting, inspections and enforcement activities. If the commissioner is satisfied with such performance, the commissioner may renew the memorandum of understanding for up to five (5) years.

(4) Within thirty (30) days of the detection of a violation of any standard, criteria or other requirement at any dispensing facility which the Department of Consumer Protection has been delegated the authority to inspect, the Department of Consumer Protection shall submit a report to the commissioner. In the event that further investigation or action by the Department of Environmental Protection is required, the commissioner shall notify the Department of Consumer Protection of such investigation or action.

(5) The Department of Consumer Protection shall submit an annual report to the commissioner each January 1 which summarizes the activities, including the number of inspections, conducted under such authority during the previous twelve (12) months.

(6) The commissioner may revoke all or part of a delegation of authority upon written notice to the Commissioner of the Department of Consumer Protection . Such revocation shall be effective upon receipt of such notice.

(7) The Commissioner of the Department of Consumer Protection may terminate all or part of the delegated responsibilities upon thirty (30) days written notice to the commissioner.