CHAPTER Env-Or 500 RECOVERY OF GASOLINE VAPORS

Statutory Authority: RSA 125-C:4, I(a); RSA 125-C:6, II & XIV

<u>REVISION NOTE #1</u>:

Document #5446, effective 8-17-92, adopted a new rule numbered as Part Env-A 1205. The existing rules Env-A 1205, 1206, 1207, 1208, and 1209 were renumbered by Document #5446 as, respectively, Env-A 1206, 1207, 1208, 1209, and 1210. The texts of these 5 rules re- numbered as Env-A 1206 through Env-A 1210 were not part of Document #5446, and the effective dates of these 5 rules were therefore not changed by Document #5446. Thus Document #5446 did not supersede prior filings for the 5 rules re-numbered as Env-A 1206 through Env-A 1206 through Env-A 1210.

Subsequent filings affecting Env-A 1205 were:

#6188, effective 2-22-96, EXPIRED 2-22-04 #8048, INTERIM, effective 2-25-04 #8141, effective 8-21-04

Document #8141, effective 8-21-04, readopted with amendments and renumbered Env-A 1205 as Env-Wm 1404. Document #8141 superseded all prior filings for Env-A 1205.

REVISION NOTE #2:

Document #10229, effective 11-16-12, readopted with amendments and redesignated former Part Env-Wm 1404 entitled Volatile Organic Compounds (VOCs): Gasoline Dispensing Facilities, Bulk Gasoline Plants, and Cargo Trucks as Chapter Env-Or 500 entitled Recovery of Gasoline Vapors pursuant to a rules reorganization plan for Department rules approved by the Director of the Office of Legislative Services on 9-7-05. Document #10029 supersedes all prior filings for Env-Wm 1404.

The prior filing for former Env-Wm 1404 after Document #8141, effective 8-21-04, was Document #10036, effective 11-29-11, which amended Env-Wm 1404.17. The provisions in Env-Wm 1404 which had not been amended by Document #10036 did not expire on 8-21-12 but were extended pursuant to RSA 541-A:14-a until superseded by rules in Env-Or 500 filed under Document #10229, effective 11-16-12.

PART Env-Or 501 PURPOSE; APPLICABILITY

Env-Or 501.01 <u>Purpose</u>. The purpose of this part is to regulate emissions of volatile organic compounds (VOCs) from gasoline storage tanks, gasoline dispensing facilities, and cargo trucks in accordance with sections 182(b)(3) and 184 of the Clean Air Act, as amended.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 501.02 Applicability. This chapter shall apply to gasoline storage tanks, gasoline dispensing facilities, and cargo trucks as follows:

(a) Env-Or 503 shall apply to all gasoline storage tanks having a capacity of 250 gallons or greater;

(b) Env-Or 504, Env-Or 506, Env-Or 508, and all applicable reference standards listed in Env-Or 509 shall apply to any gasoline dispensing facility, including those at airports and marinas, that:

(1) Has any gasoline storage tank with a capacity equal to or greater than 1,100 gallons of gasoline; or

(2) Has a total facility throughput of equal to or greater than 10,000 gallons of gasoline per rolling 30-day period;

(c) Env-Or 505 shall apply to any gasoline dispensing facility that:

(1) Is subject to stage I requirements; and

(2) Met the criteria specified in Env-Or 505.01(a) as effective November 17, 2012 under OLS document #10229, reprinted in Appendix E; and

(d) Env-Or 507, Env-Or 508, and all applicable reference standards listed in Env-Or 509 shall apply to any cargo truck that delivers gasoline to any gasoline dispensing facility that meets the applicability criteria for stage I as stated in (b), above.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 501.03 <u>Cargo Trucks at Bulk Facilities</u>. The owner or operator of any cargo truck that receives gasoline from a bulk gasoline loading terminal as defined in Env-A 1202.22 or that delivers gasoline to or receives gasoline from a bulk gasoline plant as defined in Env-A 1202.23 shall comply with the vapor recovery requirements in Env-A 1217.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

PART Env-Or 502 DEFINITIONS

Env-Or 502.01 "2-point system" means a type of stage I system that uses a vapor return connection at the gasoline storage tank or at the manifold that is independent of the fill connection, for which separate connections are made for the gasoline and vapor recovery hoses. This is also known as a "dual-point system."

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.02 "Air contaminant" means "air contaminant" as defined in RSA 125-C:2, II, reprinted in Appendix C.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.03 "Assist system" means a type of stage II system which uses a vacuum pump to assist the transfer of displaced vapors from a motor vehicle fuel tank into a gasoline storage tank at a gasoline dispensing facility.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.04 "Balance system" means a type of stage II system which relies on a tight seal between the nozzle and the vehicle fill port which causes the displacement and transfer of vapors from a motor vehicle fuel tank into a gasoline storage tank.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.05 "Cargo truck" means any motor vehicle designed or used to transport or deliver gasoline. The term includes "gasoline tank truck" as used in Env-A 1217 and "gasoline cargo tank" as used in 40 CFR Part 63, Subpart CCCCCC.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.06 "Certified vapor recovery system" means a vapor recovery system that is configured, certified, and operated as specified in the applicable reference standard in Env-Or 509.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.07 "Coaxial system" means a type of stage I system which consists of a tube within a tube, such that gasoline is delivered to the gasoline storage tank through the inner tube and the vapors from the gasoline storage tank are returned via the interstice surrounding the fill tube, with a single coupling servicing both the gasoline and vapor recovery hoses.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.08 "Emission" means "emission" as defined in RSA 125-C:2, VIII,-reprinted in Appendix C.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.09 "Gasoline" means motor fuel containing any petroleum distillate where the Reid vaporpressure of the fuel is greater than 4.0 pounds per square inch (psi).

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.10 "Gasoline dispensing facility" means any stationary facility that dispenses gasoline directly into the fuel tank of a motor vehicle, motorized water vessel, or airplane. The term includes all equipment necessary for the purpose, including but not limited to nozzles, dispensers, pumps, vapor return lines, plumbing, and gasoline storage tanks.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.11 "Gasoline storage tank" means any tank used to store gasoline other than a tank that is used as part of the bulk operations at a bulk gasoline loading terminal or bulk gasoline plant.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.12 "Leak free" means a system where no gasoline is leaked while the system is pressurized.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.13 "Lower explosive limit (LEL)" means the lowest concentration of a gas or vapor percentage by volume in air that burns or explodes if an ignition source is present at ambient temperature.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.14 "Manifold" means a device used to interconnect gasoline storage tanks via a tank vent piping system at a gasoline dispensing facility.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.15 "Monthly throughput" means "monthly throughput" as defined in 40 CFR §63.11132, reprinted in Appendix C.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.16 "Motor vehicle" means an on-road vehicle powered in whole or in part by an internal combustion engine.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22

Env-Or 502.17 "Owner or operator" means "owner or operator" as defined in 40 CFR §51.100, reprinted in Appendix C.

Source. #13458, eff 10-7-22

Env-Or 502.18 "Poppetted dry break" means a stage I coupling equipped with a poppet valve that prevents vapors in a gasoline storage tank from escaping when a vapor return hose is not connected.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.20)

Env-Or 502.19 "Pressure/Vacuum (PV) vent cap" means a relief valve installed on a stage I system that is designed to open at specific pressure and vacuum settings to protect the system from excessive pressure or vacuum.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.21)

Env-Or 502.20 "Reid vapor pressure" means the absolute vapor pressure as determined by the American Society for Testing and Materials (ASTM), test method D323-08.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.22)

Env-Or 502.21 "Stage I" means the regulatory system that requires the capture of vapors from bulk gasoline transfers.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.24)

Env-Or 502.22 "Stage I equipment" means all components and connections in a stage I system including but not limited to dry breaks, 2-point fill adaptors, coaxial fill adaptors, PV vent caps, vent piping, manifold piping, and gasoline storage tanks on which the stage I controls are located.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.26)

Env-Or 502.23 "Stage I system" means the stage I equipment installed to recover gasoline vapors displaced from a gasoline storage tank during gasoline delivery and feed the vapors back into the cargo truck.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.25)

Env-Or 502.24 "Stage II" means the regulatory system that requires the capture of vapors from gasoline transfers from bulk storage to individual motor vehicles.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.27)

Env-Or 502.25 "Stage II equipment" means all components and connections in a stage II system including but not limited to vapor return piping, coaxial hoses through which the vapor flows, gasoline nozzles, vapor pumps, and gasoline dispensers, as applicable.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.29)

Env-Or 502.26 "Stage II system" means the stage II equipment installed at a gasoline dispensing facility to recover gasoline vapors displaced from a motor vehicle fuel tank during refueling of the motor vehicle and return the vapors to the facility's gasoline storage tank.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.28)

Env-Or 502.27 "Submerged fill tube" means a tube used to load or deliver gasoline into a gasoline storage tank where the gasoline discharge is totally submerged throughout the entire gasoline delivery.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.30)

Env-Or 502.28 "Substantial modification" means any construction or alteration of a stage I system that is not normal upkeep or maintenance.

Source. 13458, eff 10-7-22

Env-Or 502.29 "Swivel adaptor" means a device mounted on the fill riser pipe and vapor return riser of a gasoline storage tank that prevents loosening or over-tightening of the adaptor by means of a swivel-type mechanism.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.31)

Env-Or 502.30 "Throughput" means the amount of gasoline dispensed by a gasoline dispensing facility.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.33)

Env-Or 502.31 "Ullage" means the empty volume of a gasoline storage tank system that contains liquid gasoline. For vapor recovery systems, ullage is expressed as accumulated gallons of empty volume for all of the gasoline storage tanks in a certified vapor recovery system.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.35)

Env-Or 502.32 "Vapor tight" means equipment or a system where there is no loss of vapors, as determined by ensuring that the concentration of vapors at a potential leak source is not equal to or greater than 100 percent of the LEL when measured with a combustible gas detector, calibrated with hexane or equivalent, at a distance of one inch from the source.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-22 (formerly Env-Or 502.36)

Env-Or 502.33 "Working days" means calendar days exclusive of weekends and state holidays.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23 (formerly Env-Or 502.37)

PART Env-Or 503 REQUIREMENTS APPLICABLE TO ALL GASOLINE STORAGE TANKS 250 GALLONS OR GREATER

Env-Or 503.01 <u>Submerged Fill Tube Requirements</u>. The owner or operator of a gasoline storage tank having a capacity equal to or greater than 250 gallons shall:

(a) Equip the tank with a submerged fill tube;

(b) Install the submerged fill tube so there is a clearance of at least 4 inches but less than 6 inches between the bottom of the tank and the point at which gasoline can first exit the submerged fill tube; and

(c) Use the submerged fill tube whenever fuel is being added to the tank.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 503.02 <u>Gasoline Mishandling Prohibited</u>. No person shall deliberately, recklessly, or negligently mishandle gasoline being delivered to or unloaded from a gasoline storage tank having a capacity equal to or greater than 250 gallons such that gasoline could evaporate into the atmosphere. For purposes of this section, mishandling includes but is not limited to spilling, discarding onto the ground or into a sewer or storm drain, or storing in an open container.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 503.03 <u>Throughput Recordkeeping Required</u>. The owner or operator of a gasoline storage tank having a capacity equal to or greater than 250 gallons shall:

(a) Record daily gasoline throughput volume;

(b) Maintain the records required by (a), above, for not less than 3 years; and

(c) Make such records available for inspection and copying upon written request by the department or the U.S. Environmental Protection Agency (EPA).

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 503.04 Required Throughput Reporting.

(a) The owner or operator of a gasoline storage tank having a capacity equal to or greater than 250 gallons at a gasoline dispensing facility that has not been subject to stage I requirements shall report throughput information in writing to the department within 30 days of the facility's throughput equaling or exceeding 10,000 gallons per rolling 30-day period.

(b) The written submittal required by (a), above, may be submitted on paper, via email, or via fax.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

PART Env-Or 504 STAGE I REQUIREMENTS FOR GASOLINE DISPENSING FACILITIES

Env-Or 504.01 Continuing Applicability of Stage I Requirements For Gasoline Dispensing Facilities.

(a) Any gasoline dispensing facility that meets the applicability criteria specified in Env-Or 501.02(b) shall continue to be subject to the stage I requirements even if a reduction in throughput occurs that would otherwise exempt the facility from these requirements.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 504.02 Stage I Equipment Requirements.

(a) The owner or operator of a gasoline dispensing facility that is subject to this part shall:

(1) Install and maintain a stage I system that is a certified vapor recovery system;

(2) Equip each vent pipe on an underground or aboveground gasoline storage tank with a PV vent cap, provided that reconstructed or newly constructed vent pipes installed after the 2022 effective date of this chapter shall be threaded and the caps approved by the California Air Resources Board (CARB);

- (3) Label each PV vent cap with the cap's rated pressure and vacuum relief setting;
- (4) Position the label specified in (3), above, so that it is visible from ground level;
- (5) Install a submerged fill tube as specified in Env-Or 503.01;
- (6) For a 2-point system, replace any failed fill adaptor with a swivel adaptor:
- (7) For a new facility, install a 2-point system;

(8) For existing coaxial fills, for any substantial modification to the tank top or replacement of the system, replace with a 2-point system; and

(9) Install a fill adaptor cap with a properly sealed gasket attached at all times, except when gasoline is being delivered.

(b) Unless otherwise specified in an applicable reference standard for the installed certified vapor recovery system, the owner or operator shall install PV vent caps on underground gasoline storage tanks and on aboveground gasoline storage tanks as follows:

(1) For pressure, 2.5 to 6.0 inches water column pressure; and

(2) For vacuum, 6.0 to 10.0 inches water column vacuum.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 504.03 Stage I System Operational Requirements.

(a) The owner or operator of a gasoline dispensing facility that is subject to this part shall:

(1) Operate the stage I system to recover at least 95% of all gasoline vapors at the facility or to be at least as efficient as the manufacturer's design efficiency, whichever is higher;

(2) Operate all stage I equipment as specified by the manufacturer or the applicable reference standard specified in Env-Or 509; and

(3) Use the installed submerged fill tube to fill the tank.

(b) No person shall transfer or allow the transfer of gasoline into a gasoline storage tank at a gasoline dispensing facility that is subject to this part unless the tank is equipped with an operational stage I certified vapor recovery system.

(c) No person shall deliberately, recklessly, or negligently vent any gasoline vapors captured by a stage I system to the atmosphere.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 504.04 <u>Required Stage I System Inspections and Maintenance</u>. The owner or operator of a gasoline dispensing facility that is subject to this part shall:

(a) Conduct monthly maintenance inspections of all stage I equipment at the facility as specified in RSA 146-C:19, II, reprinted in Appendix D, for monthly inspections;

(b) Conduct an annual maintenance inspection of all stage I equipment at the facility as specified in Env-Or 504.05;

(c) Maintain stage I equipment as specified by the manufacturer or the applicable reference standard specified in Env-Or 509; and

(d) Maintain all stage I equipment, except PV vent caps, to be leak free and vapor tight.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 504.05 Stage I System Annual Maintenance Inspection.

(a) Subject to (e), below, the owner or operator shall perform the annual maintenance inspections required by Env-Or 504.04(b):

(1) No later than September 30 of each calendar year; and

(2) Subject to (b), below, no sooner than 10 months after the prior annual inspection.

(b) If a stage I test is done in lieu of an annual inspection as provided in (e), below, the owner or operator shall perform the next annual maintenance inspection no sooner than 10 months after the stage I test.

(c) The owner or operator shall document each annual maintenance inspection, including all findings and repairs made, with written or electronic records kept in accordance with Env-Or 506.04.

(d) During each annual maintenance inspection, the owner or operator shall:

(1) Perform all inspections and maintenance specified in RSA 146-C:19, II, reprinted in Appendix D, for monthly inspections;

(2) Replace or permanently plug each drain valve located in each spill bucket;

(3) Verify that adaptor caps and dust covers are not in contact with overlying access covers; and

(4) Ensure that the submerged fill tube has the clearance specified in Env-Or 503.01(b).

(e) An annual maintenance inspection shall not be required for any calendar year in which the stage I system successfully passes a stage I system test performed as specified in Env-Or 504.06 through Env-Or 504.09 prior to the due date of the annual inspection as specified in (a), above.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 504.06 <u>Stage I System Testing Requirements</u>.

(a) The owner or operator of a gasoline dispensing facility that is subject to this part shall perform stage I system testing as specified in Env-Or 504.07 through Env-Or 504.09 for all tanks:

(1) At least once every 3 years; and

(2) Within 30 days of:

a. Failing to perform 2 consecutive monthly maintenance inspections in accordance with RSA 146-C:19, II, reprinted in Appendix D, in any given calendar year;

b. Failing to perform the annual maintenance inspection as required by Env-Or 504.05(a); or

c. Discovering that the stage I system is not functioning as specified in the applicable stage I certification reference standard in Env-Or 509.

(b) The owner or operator of each gasoline dispensing facility being tested or retested shall notify the department in writing at least 7 working days prior to performing the test of the planned test date, test time, and if applicable, the testing consultant being used.

(c) If the test is being performed pursuant to (a)(1) or (a)(2)c., above, the owner or operator shall schedule testing to be conducted on non-holiday weekdays between the hours of 8:00 a.m. and 4:00 p.m., unless otherwise arranged with the department in advance.

(d) Within 30 days of the completion of each test performed, the owner or operator of the gasoline dispensing facility being tested shall submit the test results to the department.

(e) The owner or operator of a gasoline dispensing facility that does not meet all of the criteria for a successful stage I system test shall:

(1) Investigate the cause of the failure and determine if the system is leaking within 7 days of the initial test failure;

(2) Undertake repairs or other modifications as necessary to address the reason(s) for the unsuccessful test in accordance with Env-Or 400;

(3) Retest the stage I system after repairs to confirm the effectiveness of the repairs, provided that if the modifications performed to repair the facility have not altered a portion of the system that passed the original test, the retest may be performed only on those portions of the stage I system that failed the original test; and

(4) Submit a written report to the department within 30 days of the initial test failure that describes the work performed, the repairs made, and other actions taken in response to the test failure.

(f) If a passing stage I system test is not achieved within 24 hours of the initial failed test:

(1) The individual conducting a pressure decay test shall notify the owner or operator of a gasoline dispensing facility immediately of the failed test; and

(2) The owner or operator of a gasoline dispensing facility shall report any failure of a pressure decay system to the department within 24 hours of receiving notice of the failed test.

(g) The owner or operator of a gasoline dispensing facility with a failed stage I system that is not repaired or replaced shall temporarily close the UST system within 7 days of the initial failure and permanently close the UST system within 30 days of the original failure in accordance with Env-Or 400.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23 (formerly Env-Or 504.07)

Env-Or 504.07 <u>Required Stage I System Test Components</u>. The owner or operator of a gasoline dispensing facility shall ensure that stage I system test procedures consist of the following:

- (a) A PV vent cap test for pressure and vacuum as specified in Env-Or 504.08;
- (b) A pressure decay test as specified in Env-Or 504.09; and

(c) A submerged fill tube measurement to ensure and document that the requirements of Env-Or 503.01(b) are met.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23 (formerly Env-Or 504.08)

Env-Or 504.08 PV Vent Cap Test Procedures, Criteria, and Required Actions.

(a) The PV vent cap test for pressure and vacuum required by Env-Or 504.07(a) shall be conducted in accordance with California Air Resources Board (CARB) Vapor Recovery Test Procedure (TP) 201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, dated October 8, 2003.

(b) To pass the pressure and vacuum tests specified in (a), above, the:

(1) Pressure relief point shall occur between 2.5 to 6.0 inches water column pressure;

(2) The vacuum relief point shall occur between 6.0 to 10.0 inches water column pressure; and

(3) The total leak rate of all PV vent caps at the facility shall not exceed 0.17 cubic feet per hour at a pressure of 2.0 inches water column and 0.63 cubic feet per hour at a vacuum of 4.0 inches water column.

(c) If the PV vent cap fails either the pressure test or the vacuum test as specified in (a) and (b), above, the owner or operator shall replace the PV vent cap with a PV vent cap as specified in Env-Or 504.02(b) that passes the test requirements of (b), above.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23 (formerly Env-Or 504.09)

Env-Or 504.09 Pressure Decay Test Procedures, Criteria, and Required Actions.

(a) The pressure decay test required by Env-Or 504.07(b) shall be performed:

(1) Following the PV vent cap test specified in Env-Or 504.08; and

(2) In accordance with CARB TP-201.3, as amended July 26, 2012, except that the test shall be performed at 10 inches water column pressure and include any couplers, adapters, reducers and/or non-mechanical fittings in the test.

(b) To pass the pressure decay test, the minimum allowable final pressure after the system has been pressurized to 10 inches water column and held for 5 minutes shall be as specified in Table 500-1, below:

Ullage (gallons)	Minimum Allowable Pressure (inches water column)	Ullage (gallons)	Minimum Allowable Pressure (inches water column)
<u>(gunons)</u> 500	3.70	5,000	9.30
600	4.50	6,000	9.38
700	5.20	7,000	9.46
800	5.80	8,000	9.52
900	6.20	9,000	9.56
1,000	6.50	10,000	9.60
1,250	7.05	11,000	9.62

Table 500-1 Minimum Allowable Pressure

(c) If the stage I system does not pass the pressure decay test, the owner or operator shall undertake such repairs as are necessary and retest until the stage I system passes the test.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23 (formerly Env-Or 504.10)

Env-Or 504.10 Compliance Schedule for Stage I Systems.

(a) If the through put of a gasoline dispensing facility that had not previously met the criteria of Env-Or 501.02(b) becomes equal to or greater than 10,000 gallons of gasoline per rolling 30-day period, the owner or operator shall comply with all applicable requirements of this chapter within 180 days after the date the facility becomes subject to this part.

(b) The owner or operator of a gasoline dispensing facility that begins operation after the effective date of this chapter and that meets the criteria of Env-Or 501.02(b) shall comply with all applicable requirements of this chapter upon commencement of operation.

(c) The owner or operator of a gasoline dispensing facility that already is subject to stage I requirements and that undergoes substantial modifications to any tank or piping shall comply with all applicable requirements of this chapter as to the complete stage I system, including all modified components, upon completion of the modifications.

(d) If the monthly throughput of a gasoline dispensing facility is 100,000 gallons of gasoline per month or more as of the effective date of this chapter, the owner or operator shall comply with Env-Or 504.06(a)(1) within 180 days of the 2022 effective date of this chapter.

(e) If the monthly throughput of a gasoline dispensing facility increases to 100,000 gallons of gasoline per month or more subsequent to the 2022 effective date of this chapter, then:

(1) The owner or operator shall comply with Env-Or 504.06(a)(1) within 180 days of the throughput becoming equal to or greater than 100,000 gallons of gasoline per month; and

(2) The facility shall continue to be subject to Env-Or 504.06(a)(1) even if a reduction in throughput occurs to below the specified threshold.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23 (formerly Env-Or 504.11)

PART Env-Or 505 STAGE II REQUIREMENTS FOR GASOLINE DISPENSING FACILITIES

Env-Or 505.01 <u>Applicability of Stage II Operation and Decommissioning Requirements</u>. The requirements of this part shall apply to those facilities that were subject to the Stage II requirements previously in effect, as specified in Env-Or 505.01 and Env-Or 505.02 as effective November 17, 2012 under OLS document #10229, reprinted in Appendix E, which were required to decommission all Stage II equipment on or before December 22, 2015 pursuant to Env-Or 505.03 as effective November 17, 2012 under OLS document #10229, also reprinted in Appendix E.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 505.02 Decommissioning Stage II Systems.

(a) Subject to (d), below, any owner or operator of a gasoline dispensing facility equipped with stage II equipment that has not decommissioned the stage II equipment as of the 2022 effective date of this section shall do so in accordance with this section.

(b) To comply with (a), above, the owner or perator shall do the following in the order listed:

(1) Submit a completed notification form as described in Env-Or 506.02 to notify the department of the intent to decommission the stage II equipment;

(2) Conduct a pressure decay test on the stage II vapor return piping as specified in Env-Or 504.06 and Env-Or 504.09 within 30 days prior to the scheduled decommissioning of the stage II equipment;

(3) Decommission the stage II system in accordance with all of the steps listed in the Petroleum Equipment Institute Recommended Practices for Installation and Testing of Vapor-Recovery Systems at Vehicle-Fueling Sites, PEI RP 300-09, Section 14, Decommissioning Stage II Vapor Recovery Piping, 2019 edition; and

(4) If the stage II vapor return piping did not pass the pressure decay test even after retesting within 30 days of the failed test, permanently close the stage II vapor return piping as specified in Env-Or 408.06 through Env-Or 408.10.

(c) Any owner or operator who decommissions stage II vapor recovery equipment shall continue to comply with the pressure decay and PV vent cap pressure and vacuum testing requirements of Env-Or 504.06 through Env-Or 504.10 for all equipment that remains in place, including any stage II vapor return piping that remains connected at the tank.

(d) The requirement to decommission a stage II vapor recovery system shall not apply to political subdivisions. If a political subdivision that owns a stage II system chooses to decommission the equipment, such decommissioning shall comply with (b), above.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23 (formerly Env-Or 504.03)

PART Env-Or 506 NOTIFICATION AND RECORDKEEPING FOR GASOLINE DISPENSING FACILITIES

Env-Or 506.01 Required Throughput Reporting.

(a) The owner or operator of a gasoline dispensing facility that is subject to Env-Or 504 shall report throughput information in writing to the department within 30 days of the throughput equaling or exceeding 100,000 gallons per rolling 30-day period.

(b) The written submittal required by (a), above, may be submitted on paper, via email, or via fax.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 506.02 Notification Requirements.

(a) The owner or operator of a gasoline dispensing facility that is subject to stage I requirements shall submit the information specified in Env-Or 506.03 to the department as follows:

(1) At least 30 days prior to any construction, installation, or substantial modification that affects a stage I system;

(2) Prior to decommissioning a stage II system as specified in Env-Or 505.02(b)(1);

(3) At least 10 days prior to a change in use of a storage tank from gasoline to non-gasoline or non-gasoline to gasoline; and

(4) Within 10 days after a change of any of the items specified in Env-Or 506.03.

(b) If ownership of a gasoline dispensing facility that is subject to stage I requirements transferred, the new owner shall submit the information specified in Env-Or 506.03 to the department within 10 days of the transfer.

(c) The owner or operator shall sign and date the document on which the information issue is submitted

(d) The signature of the owner or operator shall constitute:

(1) Certification that the information being submitted is true and correct to the best of the individual's knowledge and belief; and

(2) Acknowledgement that the individual is subject to the penalties specified in RSA 641 for falsification in official matters.

(e) The department shall, within 30 days of receipt of the information, inform the individual who submitted the information of any deficiencies in the notification.

(f) If the department is not able to determine the effectiveness or design of the equipment or system being constructed, installed, or substantially modified, the department shall request additional information in order to make such determination.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 506.03 <u>Vapor Recovery Notification Required Information</u>. The information required to be submitted by Env-Or 506.02 shall be as follows:

(a) The name, physical address, mailing address, main telephone number including area code, main fax number including area code, and site number of the gasoline distribution facility;

(b) The name, mailing address, daytime telephone number including area code, fax number including area code, and email address of each owner of the gasoline distribution facility;

(c) The name, mailing address, daytime telephone number including area code, fax number including area code, and email address of the individual who is responsible for the stage I system at the gasoline distribution facility;

(d) A description of all stage I equipment at the gasoline distribution facility, including but not limited to the 2-point or coaxial stage I system and, if there is a 2-point system, a statement as to whether the dry break adaptor is located on the manifold or on the tank;

(e) The number of gasoline storage tanks at the gasoline distribution facility and for each tank, the size of the tank and the grade of gasoline contained in the tank;

(f) The date when construction, installation, or substantial modification of any stage I equipment at the gasoline distribution facility occurred.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 506.04 <u>Recordkeeping Requirements for Gasoline Dispensing Facilities</u>. The owner or operator of a gasoline dispensing facility that is subject to this chapter shall:

(a) Maintain the following records such that they are available during a department or EPA inspection:

(1) The records of each monthly maintenance inspection conducted over the prior 3 years as required by RSA 146-C:19, II, as applicable;

(2) The records of each annual maintenance inspection conducted over the prior 3 years as required by Env-Or 504.05;

(3) A description of all repair work completed as a result of any of the inspections included in (1) or (2), above; and

(4) All other information regarding equipment failures, repairs, and maintenance over the prior 3 years that is not included in (3); above;

(b) Provide the following records upon request of the department or EPA:

- (1) All records of installation of stage I equipment;
- (2) Bulk liquid receipts; and
- (3) A copy of each notification submitted pursuant to Env-Or 506.03 for the facility; and
- (c) Retain the records identified in (a) and (b), above, as specified Table 500-2, below:

Table 500-2: Required Record Retention Periods

Record Required byEnv-Or 506.04	Description of Record	Required Retention Period
(b)(2)	Bulk liquid receipts	Until such time as the equipment is no longer on-site and a site investigation has determined that the equipment did not cause or contribute to a discharge of gasoline.
(a)(1)	A record of each monthly maintenance inspection as specified in RSA 146- C:19, II	
(a)(2)	A record of each annual maintenance inspection as specified in Env-Or 504.05	3 years from date of receipt or completion, as applicable, provided
(a)(3)	A description of all repair work completed as a result of any of the inspections included in $(a)(1)$ or $(a)(2)$	that if the owner or operator has been notified of a pending inquiry into the integrity of the gasoline storage tank(s) at the facility, then
(a)(4)	All other information that is relevant to equipment failures, repairs, and maintenance that is not included in (a)(3)	until such time as the stage I equipment, as applicable, is no longer on-site and a site investigation has determined that the
(b)(1)	All records of installation of stage I equipment	equipment did not cause or contribute to a discharge of gasoline.
(b)(3)	A copy of each notification submitted pursuant to Env-Or 506.03 for the facility	

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

PART Env-Or 507 STAGE I REQUIREMENTS FOR CARGO TRUCKS

Env-Or 507.01 Required Equipment for Cargo Trucks.

(a) The owner or operator of a cargo truck that meets the criteria specified in Env-Or 501.02(d) shall install and maintain a stage I system to serve the cargo truck that is a certified vapor recovery system.

(b) All hoses and stage I equipment on the cargo truck shall be specifically manufactured for use in transferring gasoline or otherwise certified by the manufacturer as compatible with gasoline.

(c) The cargo truck shall be connected during gasoline delivery to a gasoline storage tank using:

(1) For a coaxial system, a separate coaxial coupling with one vapor return hose used for every fill hose in service;

(2) For a 2-point system where the tanks are connected with a manifold, a minimum of one vapor return hose used for every 2 fill hoses in service; and

(3) For a 2-point system where the tanks are not connected with a manifold, a separate vapor recovery connection at each tank being filled.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 507.02 <u>Maintenance Requirements for Cargo Trucks</u>. The owner or operator of a cargo truck that is subject to this part shall maintain stage I equipment as specified by the manufacturer and so as to be leak-free and vapor tight.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 507.03 Operational Requirements for Cargo Trucks.

(a) The owner or operator of a cargo truck that is subject to this part shall operate the stage I system to recover at least 95% of all gasoline vapors released from the gasoline tank to which the fuel is being delivered during unloading operations at the facility or to be at least as efficient as the manufacturer's design efficiency, whichever is higher. This standard shall apply to each cargo truck during each applicable gasoline delivery.

(b) During loading of gasoline at a bulk gasoline loading terminal and during loading or unloading of gasoline at a bulk gasoline plant, the owner or operator of the cargo truck shall verify that the cargo truck has a back pressure that does not exceed:

(1) A pressure setting of 18.0 inches water column pressure; and

(2) A vacuum setting of 5.9 inches water column vacuum.

(c) During unloading of gasoline at a gasoline dispensing facility, the owner or operator of the cargo truck shall verify that the cargo truck has a back pressure that does not exceed a vacuum setting of 5.9 inches

water column vacuum.

(d) If a cargo truck does not meet the requirements specified in (b) or (c), above, as applicable, the owner or operator of the cargo truck shall repair and retest the truck within 15 days.

(e) The owner or operator of a cargo truck shall securely fasten all hatches on the truck except when access is needed to take a measurement of gasoline level or perform maintenance activities.

(f) No person shall unload gasoline from any cargo truck to any gasoline storage tank at any gasoline dispensing facility that is subject to Env-Or 504 unless the owner or operator of the facility has installed and is maintaining as operational a certified stage I vapor recovery system.

(g) No person shall deliberately, recklessly, or negligently vent any vapors captured by the stage I system serving a cargo truck to the atmosphere.

(h) No person shall deliberately, recklessly, or negligently mishandle gasoline being loaded to or unloaded from a cargo truck such that the gasoline could evaporate into the atmosphere. For purposes of this section, mishandling includes but is not limited to spilling, discarding into a sewer or storm drain, or storing in an open container.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 507.04 <u>Testing Requirements for Cargo Trucks</u>. The owner or operator of a cargo truck that is subject to this part shall:

(a) Conduct an annual certification test in accordance with 40 CFR §63.425(e); and

(b) If the cargo truck does not meet the applicable parameters specified in 40 CFR §63.425(e), undertake such repairs as are necessary and retest.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 507.05 <u>Monitoring for Cargo Trucks</u>. The department shall inspect a cargo truck to determine whether the truck is leak tight and vapor tight either:

(a) Upon receipt of information that supports a reasonable conclusion that the truck might not be leak tight and vapor tight, including visual and olfactory information; or

(b) Pursuant to a routine inspection.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 507.06 <u>Treatment of Vapor Requirements for Cargo Trucks</u>. The owner or operator of a cargo truck that is subject to this part shall dispose of the vapors at a bulk terminal equipped with a certified stage I vapor recovery system, using the vapor collection system and vapor destruction methods described in Env-A1217.06(c).

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 507.07 <u>Recordkeeping Requirements for Cargo Trucks</u>.

(a) The owner or operator of a cargo truck that is subject to this part shall maintain in the cargo truck at all times the following:

(1) Documentation that the cargo truck has met the requirements of Env-Or 507.04;

(2) Test results for both the pressure and vacuum tests required by Env-Or 507.04; and

(3) Proof of compliance and the date of all tests conducted in accordance with the stage I testing requirements for cargo trucks as stated in this part, which shall be displayed on the cargo truck.

(b) The driver of a cargo truck that is subject to this part shall provide the documents listed in (a), above, upon request of the department or EPA for inspection and copying.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

PART Env-Or 508 WAIVERS

Env-Or 508.01 <u>Applicability</u>. An owner or operator who wishes to obtain a waiver from any requirement established by a rule in this chapter shall request the waiver as specified in Env-Or 508.02.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 508.02 Waiver Requests.

(a) Each request for a waiver shall be filed in writing by the owner or operator who is seeking the waiver.

(b) The person requesting the waiver shall provide the following information to the department:

(1) The name, mailing address, and daytime telephone number including area code of the requestor and, if available, a fax number including area code and e-mail address of the requestor;

(2) As applicable, the name, physical address, and site number of the facility to which the waiver request relates, or the registration number of the cargo truck to which the waiver would apply;

(3) The specific rule section or paragraph that established the requirement for which a waiver is being requested;

(4) A full explanation of why a waiver is being requested, including an explanation of the operational and economic consequences of complying with the rule as written;

(5) Whether the need for the waiver is temporary, and if so, the estimated length of time that the waiver will be needed;

(6) If applicable, a full explanation of the alternative that is proposed to be substituted for the requirement established in the rule, including written documentation or data, or both, to support the alternative; and

(7) A full explanation of why the requestor believes that having the waiver granted will meet the criteria in Env-Or 508.03.

- (c) The requestor shall sign and date the request.
- (d) The signature shall constitute certification that:

(1) The information provided is true, complete, and not misleading to the knowledge and belief of the signer; and

(2) The signer understands that:

a. A waiver granted based on false, incomplete, or misleading information shall be subject to revocation; and

b. The signer is subject to penalties for falsification in official matters, currently in RSA 641.

(e) The department shall transmit a copy of each waiver request filed in compliance with (a) through (c), above, to EPA within 5 working days of its receipt.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 508.03 <u>Waiver Criteria</u>.

(a) Subject to (b) and (c), below, the department shall grant a waiver if:

(1) Granting a waiver will not result in an adverse impact on the environment, public health, or public safety that is more significant than that which would result from complying with the rule; and

(2) One or more of the following conditions is satisfied:

a. Granting a waiver is consistent with the intent and purpose of the rule being waived; or

b. Any benefit to "public health or safety or to the environment" arising from strict compliance with the rule is outweighed by the operational and economic consequences of such compliance.

(b) No waiver shall be granted if the effect of the waiver would be to waive or modify any state statute, unless a waiver is expressly allowed by the statute that would be waived.

(c) No waiver shall be granted if the effect of the waiver would be to waive or modify any federal requirement, unless:

(1) The federal statute or regulation that establishes the requirement allows for waivers; and

(2) EPA does not object to the waiver being granted.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Env-Or 508.04 Decision on Waiver Requests; Conditions.

(a) The department shall notify the requestor of the decision in writing within 60 days of receipt of a request that meets the requirements of Env-Or 508.02.

(b) If the request is denied, the department shall identify the specific reason(s) for the denial.

(c) The department shall include such conditions in a waiver as are necessary to ensure that the criteria of Env-Or 508.03 will be met.

(d) If the need for a waiver is temporary, the waiver shall specify the date on which it will expire.

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

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PART Env-Or 509 REFERENCE STANDARDS

Env-Or 509.01 <u>Reference Standards</u>.A vapor recovery system for an underground or aboveground gasoline storage tank or cargo truck shall be designed, installed, tested, and certified for use in accordance with one or more of the applicable reference standards listed below:

(a) PEI/RP 300-09, "Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle Fueling Sites", Petroleum Equipment Institute, 2019 edition; and

(b) The CARB executive orders, approval letters, and test methods set forth in Table 500-3, below:

CARB ID	Description	Date
G – 70 - 20	Modification of the Certification of the Texaco Stage I Vapor Recovery System for Underground Storage Tanks at Gasoline Service Stations	08/21/78
G - 70 - 34 - A	Modification of the Certification of the Parker Hannifin F428 Vapor Recovery Adaptor for Military Delivery Tanks to Include the Parker Hannifin F428A	
G - 70 - 50	Certification of the Vapor Recovery Kit for M857, M967, M969, and M970 Military Delivery Tanks	12/05/79
G-70-97-A	Stage I Vapor Recovery Systems for Underground Gasoline Tanks at Service Stations	12/09/85
G - 70 - 102 - A	Certification of a Phase I Vapor Recovery System for Aboveground Storage Tanks with less than 40,000 Gallons Capacity for Gasoline or Gasoline/Methanol Blended Fuels	05/25/93
G - 70 - 106	Adoption of "Test Procedure Gasoline Cargo Tanks" as an Equivalen Method for the Year-round Performance Standards for Gasoline Cargo Tanks	t 01/27/86
G - 70 - 116 - F	ConVault Aboveground Tank Vapor Recovery System	11/30/95
G - 70 - 128	Bryant Fuel Cell Aboveground Tank Vapor Recovery System	08/27/90
G - 70 - 130 - A	Petrovault Aboveground Tank Vapor Recovery System	02/26/93
G - 70 - 131 - A	Tank Vault Aboveground Tank Vapor Recovery System	03/17/92
G - 70 - 132 - A	Supervault Aboveground Tank Vapor Recovery System	10/16/90
G - 70 - 132 - B	Supervault Aboveground Tank Vapor Recovery System	05/16/95
G - 70 - 136	FireSafe Aboveground Tank Vapor Recovery System	04/15/91
G - 70 - 137	FuelSafe Aboveground Tank Vapor Recovery System	10/4/91
G - 70 - 148 - A	Lube Cube Aboveground Tank Vapor Recovery System	05/04/95
G - 70 - 152	Moiser Brothers Tanks and Manufacturing Aboveground Tank Vapor Recovery System	10/31/93
G - 70 - 155	Petroleum Marketing Aboveground Tank Vapor Recovery System	03/12/94

Table 500-3: CARB Reference Standards

Source. (See Revision Note #1 and Revision Note #2 at chapter heading for Env-Or 500) #10229, eff 11-17-12; ss by #13458, eff 10-7-23

Rule Section(s)	State Statute(s) Implemented	Federal Statutes Implemented
Env-Or 501	RSA 125-C:4, I(a)	42 U.S.C. 7511a(b)(3); 42 U.S.C. 7511c(b)(2)
Env-Or 502	RSA 125-C:4, I(a)	42 U.S.C. 7511a(b)(3); 42 U.S.C. 7511c(b)(2)
Env-Or 503	RSA 125-C:6, XIV	42 U.S.C. 7511a(b)(3); 42 U.S.C. 7511c(b)(2)
Env-Or 504	RSA 125-C:6, XIV	42 U.S.C. 7511a(b)(3); 42 U.S.C. 7511c(b)(2)
Env-Or 505	RSA 125-C:6, II & XIV; RSA 125-C:12, I	42 U.S.C. 7511a(b)(3); 42 U.S.C. 7511c(b)(2)
Env-Or 506	RSA 125-C:4, I(a); RSA 125-C:6, II &	42 U.S.C. 7511a(b)(3); 42 U.S.C. 7511c(b)(2)
	XIV; RSA 125-C:12, I	
Env-Or 507	RSA 125-C:6, XIV	42 U.S.C. 7511a(b)(3); 42 U.S.C. 7511c(b)(2)
Env-Or 508	RSA 125-C:4, I(m); RSA 541-A:22, IV	
Env-Or 509	RSA 125-C:6, XIV	42 U.S.C. 7511a(b)(3); 42 U.S.C. 7511c(b)(2)

APPENDIX A: STATE AND FEDERAL STATUTES IMPLEMENTED

Rule	Document Title	Dated	Obtain at:
Env-Or	CARB TP 201.1E Leak	10-08-2003	
504.08(a) &	Rate and Cracking Pressure		https://www.arb.ca.gov/testmeth/vol2/tp201.1e_oct2
Env-Or	of Pressure/Vacuum Vent		<u>003.pdf</u>
509.01(b)	Valves		- no cost
Env-Or	CARB TP 201.3	07-26-12	https://www.arb.ca.gov/testmeth/vol2/tp201.3 april2
504.09(a);	Determination of 2 Inch		013.pdf - no cost
Env-Or	WC Static Pressure		
504.06(c) &	Performance of Vapor		
Env-Or	Recovery Systems of		
509.01(b)	Dispensing Facilities		
Env-Or	Recommended Practices for	2019	https://www.pei.org/rp300 - purchase for \$195.00
505.02(b) &	Installation and Testing of		(nonmember)
Env-Or	Vapor-Recovery Systems at		
509.01(a)	Vehicle-Fueling Sites, PEI		
	RP 300-19, Section 14,		
	Decommissioning Stage II		
	Vapor Recovery Piping		
Env-Or	G-70-97-A Stage I Vapor	12-09-1985	https://archive.epa.gov/ttn/ozone/web/pdf/emco_wh
509.01(b)	Recovery Systems for		eaton attachment 1 09-30-04.pdf -no cost
	Underground Gasoline		
	Storage Tanks at Service		
	Stations		
Env-Or	G-70-102-A Certification	05-25-1993	http://www.arb.ca.gov/vapor/above/g70102a.pdf -
509.01(b)	of a Phase I Vapor		no cost
	Recovery System for		
	Aboveground Storage		
	Tanks with less than 40,000		
	Gallons Capacity for		
	Gasoline or		
	Gasoline/Methanol Blended		
	Fuels		

APPENDIX B: DOCUMENTS INCORPORATED BY REFERENCE

Rule	Document Title	Dated	Obtain at:
Env-Or	G-70-106 Relating to the	01-27-1986	https://ww3.arb.ca.gov/vapor/eos/eo-
509.01(b)	Adoption of "Test		106/g70106.pdf - nocost
	Procedure Gasoline Cargo		
	Tanks" as an Equivalent		
	Method for the Year-round		
	Performance Standards for		
	Gasoline Cargo Tanks		
Env-Or	G-70-110 Certification of	01-20-1987	https://ww2.arb.ca.gov/executive-order-g-70-110 -
509.01 (b)	the Stage I and Stage II		For a copy of the Executive Order,
	Vapor Recovery Systems		contact <u>vapor@arb.ca.gov</u> .
	for Methanol Fueling		
	Facilities		
Env-Or	G-70-116-F Certification of	11-30-1995	http://www.arb.ca.gov/vapor/above/g70116f.pdf -
509.01(b)	ConVault, Inc.		no cost
	Aboveground		
	Filling/Dispensing Vapor		
	Recovery System		
Env-Or	G-70-128 Certification of	08-27-1990	http://www.arb.ca.gov/vapor/above/g70128.pdf -
509.01(b)	Bryant Fuel Systems		no cost
	Aboveground Tank		
	Filling/Dispensing Vapor		
	Recovery System		
Env-Or	G-70-130-A Certification	02-26-1993	http://www.arb.ca.gov/vapor/above/g70130a.pdf -
509.01(b)	of Sannipoli Corporation		no cost
	Petro Vault Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery System		
Env-Or	G-70-131-A Certification	03-17-1992	http://www.arb.ca.gov/vapor/above/g70131a.pdf -
509.01(b)	of Hallmark Industries		no cost
	Tank Vault Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery System		
Env-Or	G-70-132-A Certification	12-04-1992	http://www.arb.ca.gov/vapor/above/g70132a.pdf -
509.01(b)	of Trusco Tank, Inc.,		no cost
	Supervault Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery System		
Env-Or	G-70-132-B Certification of	05-16-1995	http://www.arb.ca.gov/vapor/above/g70132b.pdf -
509.01(b)	Trusco Tank, Incorporated		no cost
	Supervault Aboveground		
	Filling/Dispensing Vapor		
	Recovery System		
Env-Or	G-70-136 Certification of	04-15-1991	http://www.arb.ca.gov/vapor/above/g70136.pdf -
509.01(b)	Ned Pepper, Incorporated		no cost
	FireSafe Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery System		

Rule	Document Title	Dated	Obtain at:
Env-Or	G-70-137 Certification of	10-04-1991	http://www.arb.ca.gov/vapor/above/g70137.pdf -
509.01(b)	Ace Tank & Equipment		no cost
	Company Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery System		
	"FuelSafe"		
Env-Or	G-70-142-B Certification of	09-09-1994	http://www.arb.ca.gov/vapor/above/142b-
509.01(b)	a Phase I Vapor Recovery		<u>legal.pdf</u> - no cost
	System for Aboveground		
	Gasoline Storage Tanks		
Env-Or	G-70-143 Certification of	08-07-1992	http://www.arb.ca.gov/vapor/above/g70143.pdf -
509.01(b)	Teichert Precast P/T Vault		no cost
	Aboveground Tank		
	Filling/Dispensing Vapor		
	Recovery System		
Env-Or	G-70-148-A Certification	05-04-1995	http://www.arb.ca.gov/vapor/above/g70148a.pdf -
509.01(b)	of Hoover Containment		no cost
	Systems, Inc. Lube Cube		
	Aboveground Tank		
	Filling/Dispensing Vapor		
	Recovery System		
Env-Or	G-70-152 Certification of	10-31-1993	http://www.arb.ca.gov/vapor/above/g70152.pdf -
509.01(b)	Moiser Brothers Tanks and		no cost
	Manufacturing Protected		
	Aboveground Gasoline		
	Tank Filling/Dispensing		
	Vapor Recovery System		
Env-Or	G-70-155 Certification of	03-12-1994	http://www.arb.ca.gov/vapor/above/g70155.pdf -
509.01(b)	Petroleum Marketing		no cost
	Services' Aboveground		
	Tank Filling & Dispensing		
.	Vapor Recovery Systems	05.00.1004	
Env-Or	G-70-156 Certification of	05-23-1994	http://www.arb.ca.gov/vapor/above/g70156.pdf -
509.01(b)	RECoVAULT Incorporated		no cost
	Ecovault Aboveground		
	Tank Filling & Dispensing		
	Vacuum Assist Vapor		
Env-Or	Recovery SystemG-70-157 Certification of	05-23-1994	http://www.arb.ca.gov/vapor/above/g70157.pdf -
Env-Or 509.01(b)		03-23-1994	· · · · · · · · ·
509.01(0)	RECoVAULT Incorporated Ecovault Aboveground		no cost
	Tank Filling & Dispensing		
	Balance Vapor Recovery		
	System		
	System		

Rule	Document Title	Dated	Obtain at:
Env-Or	G-70-158-A Certification	03-24-1995	http://www.arb.ca.gov/vapor/above/g70158a.pdf -
509.01(b)	of San Luis Tank Piping		no cost
	Construction Co., Inc.		
	Firesafe Aboveground		
	Filling/Dispensing Vapor		
	Recovery System		
Env-Or	G-70-160 Certification of	11-09-1994	http://www.arb.ca.gov/vapor/above/g70160.pdf -
509.01(b)	Above Ground Tank Vault		no cost
	Aboveground Tank		
	Filling/Dispensing Vapor		
	Recovery System		
Env-Or	G-70-161 Certification of	11-30-1994	http://www.arb.ca.gov/vapor/above/g70161.pdf -
509.01(b)	Hoover Containment		no cost
	Systems, Incorporated		
	Fuelmaster Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery System		
Env-Or	G-70-162-A Certification	03-02-1998	http://www.arb.ca.gov/vapor/above/162-a-
509.01(b)	of Steel Tank Institute		<u>legal.pdf</u> - no cost
	Fireguard Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery System		
Env-Or	G-70-167 Certification of	01-09-1996	http://www.arb.ca.gov/vapor/above/g70167.pdf -
509.01(b)	Bakersfield Tank Company		no cost
	Enviro-Vault Aboveground		
	Filling/Dispensing Vapor		
E	Recovery System	10 15 1005	1.4
Env-Or	G-70-168 Bryant Fuel	10-15-1995	http://www.arb.ca.gov/vapor/above/g70168.pdf -
509.01(b)	Systems Phase I Vapor		no cost
	Recovery Systems		

Rule	Document Title	Dated	Obtain at:
Env-Or	G-70-190 Certification of	10-08-1999	http://www.arb.ca.gov/vapor/above/g70190.pdf -
509.01(b)	Guardian Containment,		no cost
	Corporation Armor Cast		
	Aboveground Tank		
	Filling/Dispensing Vapor		
	Recovery System		
Env-Or	G-70-194 Certification of	05-11-2000	http://www.arb.ca.gov/vapor/above/g70194.pdf -
509.01(b)	Containment Solutions		no cost
	Rectangular and Cylindrical		
	Hoover Vault Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery Systems		
Env-Or	G-70-195 Certification of	03-31-2000	http://www.arb.ca.gov/vapor/above/g70195.pdf -
509.01(b)	The Cretex Companies, Inc		no cost
	FuelVault Aboveground		
	Tank Filling/Dispensing		
	Vapor Recovery System		
Env-Or	G-70-198 Continued Use of	06-04-2001	https://ww2.arb.ca.gov/executive-order-g-70-198
509.01(b)	Vapor Recovery Systems		- For a copy of the Executive Order
	for which Certification is		contact <u>vapor@arb.ca.gov</u>
	Terminated by the		
	Adoption of New Standards		
Env-Or	G-70-199-AH Relating to	01-23-2002	https://ww2.arb.ca.gov/executive-order-g-70-199 -
509.01(b)	Certification of Gasoline		no cost
	Dispensing Nozzles to the		
	Liquid Retention of 350		
	milliliters per 1,000 Gallons		
	Dispensed		
Env-Or	VR-101-Q Phil-Tite / EBW	06-01-2018	https://ww3.arb.ca.gov/vapor/eos/eo-vr101/eo-
509.01(b)	/ FFS Phase I Vapor		<u>vr101q/eo-vr101q.pdf</u> - no cost
	Recovery System		
Env-Or	VR-102-V OPW Phase I	05-31-2021	https://ww3.arb.ca.gov/vapor/eos/eo-vr102/eo-
509.01(b)	Vapor Recovery System		<u>vr102q/eo-vr102q.pdf</u>
Env-Or	CP-201 Certification	06-04-2019	https://ww2.arb.ca.gov/sites/default/files/2022-
509.01(b)	Procedure for Vapor		03/cp201%20effective%20040122.pdf
	Recovery Systems at		(Amended July 12, 2021)
	Gasoline Dispensing		
	Facilities		

APPENDIX C: DEFINITIONS FROM STATE STATUTES AND FEDERAL RULES

<u>RSA 125-C:2</u>, II: "Air contaminant" means soot, cinders, ashes, any dust, fume, gas, mist (other than water),odor, toxic or radioactive material, particulate matter, or any combination thereof.

RSA 125-C:2, VIII: "Emission" means a release into the outdoor air of air contaminants.

<u>40 CFR §63.11132</u>: "Monthly throughput" means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

<u>40 CFR §51.100</u>: "Owner or operator" means any person who owns, leases, operates, controls, or supervises afacility, building, structure, or installation which directly or indirectly result or may result in emissions of anyair pollutant for which a national standard is in effect."

APPENDIX D: RSA 146-C:19

146-C:19 Additional Operator Requirements. -

I. Written operator response guidelines shall include spill reporting procedures, contact phone numbers, malfunctioning equipment lock-out/tag-out and notification procedures, and initial mitigation protocol for emergencies.

II. Monthly visual inspections meeting the following minimum requirements shall be conducted at all underground storage facilities:

(a) Inspections shall be conducted by or under the direction of the class A or B operator.

(b) The results of each inspection shall be recorded in a monthly inspection report. The records shall be maintained and made available for department inspection and copying for a period of not less than 3 years.

(c) The following items shall be inspected and shall be reported on the inspection report as no defect, defect, and how any defect was resolved:

(1) Inspect all vent risers for visible damage and repair as necessary.

(2) Inspect each pressure/vacuum vent cap and if the cap is missing or damaged, replace the cap.

(3) Inspect each spill bucket for the presence of oil, water, or debris; remove and dispose of any oil, water, or debris in accordance with all applicable federal, state, and local requirements; and repair each spill bucket as necessary.

(4) Inspect each coaxial fill adaptor cap, 2-point fill adaptor cap, and dry break adaptor cap for looseness, the presence of a gasket, and tightness of fit, and tighten, repair, or replace as necessary.

(5) Inspect each coaxial fill adaptor, 2-point fill adaptor, and dry break adaptor for tightness of fit, and tighten or replace as necessary.

(6) Inspect each dry break poppet valve for a continuous seal, that it depresses evenly across the valve seat, and that it reseats properly and if not, repair or replace as necessary.

(7) Inspect each motor fuel dispenser hose for tears, leaks, holes, kinks, crimps, or defects of any kind andreplace as necessary.

(8) Inspect each motor fuel dispenser nozzle for leaks, obstruction of vapor recovery holes, or defects of any kind and replace as necessary.

(9) Inspect each motor fuel dispenser cabinet interior for leaking components and the presence of oil, water, or debris; remove and dispose of any oil, water, or debris in accordance with all applicable federal, state, and local requirements; and repair each component as necessary. If a motor fuel dispenser cabinet interior has a liquid-tight containment sump with continuous leak detection monitoring provided by either a dispenser sump sensor or the attached piping sump sensor, the motor fuel dispenser cabinet interior inspection may be conducted annually and the results reported in the associated monthly inspection report.

(10) Inspect each oil transfer and dispensing area for the presence of oil spills and report and remediateany spill in accordance with all applicable federal, state, and local requirements.

(11) Inspect each alarm enunciation panel for proper operation of product monitoring and leak detectionsystems and repair or replace system components as necessary.

(d) Deficiencies discovered during the visual inspection shall be repaired or otherwise resolved within 30days.

III. The class B operator shall ensure that tanks, pumps, and appurtenances that will store or dispense oil arecompatible with the oil or oil blends to be stored or dispensed.

IV. Delegation of the responsibilities of this section to designated operators shall not relieve the owner from liability for noncompliance with the requirements of this section.

Appendix E: Applicability of Stage II Operation and Decommissioning Requirements Effective November 17, 2012

Env-Or 505.01 Applicability of Stage II Requirements.

(a) The owner or operator of a gasoline storage tank at a gasoline dispensing facility shall comply with this part in addition to Env-Or 503, Env-Or 504, Env-Or 506, Env-Or 508, and applicable reference standards in Env-Or 509 if the facility:

(1) Meets the criteria specified in Env-Or 501.02(b) for a stage I system;

- (2) Is located in Hillsborough, Merrimack, Rockingham, or Strafford county;
- (3) Does not qualify for an exemption pursuant to Env-Or 505.02; and
- (4) Meets one of the following criteria:

a. The facility has a throughput equal to or greater than 35,000 gallons per rolling 30-dayperiod; or

b. The facility was constructed after November 15, 1990, regardless of the amount ofthroughput.

(b) Once a facility meets the applicability criteria in (a), above, the owner or operator shall continue tobe subject to the stage II requirements even if a reduction in throughput occurs to below the threshold specified in (a)(4)a, above.

Env-Or 505.02 Exemptions from Stage II Requirements.

(a) Any gasoline dispensing facility that services only motorized water vessels, airplanes, oragricultural equipment shall be exempt from this part.

(b) The owner or operator of a gasoline dispensing facility that meets the criteria specified in Env-Or 505.01(a)(1), (2), and (4) shall be exempt from the requirements to install and to operate stage II equipmentprovided that:

(1) Facility construction commences on or after January 1, 2012;

(2) Facility construction commenced prior to January 1, 2012 but stage II equipment had not beeninstalled prior to January 1, 2012; or

(3) The owner or operator decommissions the stage II equipment in accordance with Env-Or505.03.

Env-Or 505.03 Decommissioning Stage II Systems.

(a) Subject to (d), below, the owner or operator of a gasoline dispensing facility equipped with stage II equipment shall decommission the stage II equipment by December 22, 2015 in accordance with this section.

(b) To qualify for an exemption under Env-Or 505.02(b)(3) or to comply with (a), above, the owner oroperator shall do the following in the order listed:

(1) Submit a completed notification form as described in Env-Or 506.02 to notify the department of the intent to decommission the stage II equipment;

(2) Conduct a pressure decay test on the stage II vapor return piping as specified in Env-Or 505.11 and Env-Or 505.12 within 30 days prior to the scheduled decommissioning of the stage II equipment;

(3) Decommission the stage II system in accordance with all of the steps listed in the

Petroleum Equipment Institute Recommended Practices for Installation and Testing of Vapor-Recovery Systems at Vehicle-Fueling Sites, PEI RP 300-09, Section 14, Decommissioning Stage II Vapor Recovery Piping, 2009 edition; and

(4) If the stage II vapor return piping did not pass the pressure decay test even after retesting in accordance with Env-Or 505.10(b), permanently close the stage II vapor return piping as specified in Env-Wm 1401.18(g)(2) or successor rule in subtitle Env-Or.

(c) Any owner or operator who decommissions stage II vapor recovery equipment shall continue to comply with the pressure decay and PV vent cap pressure and vacuum testing requirements of Env-Or 505.10 through Env-Or 505.12 for all equipment that remains in place, including any stage II vapor return piping that remains connected at the tank.

(d) The requirement to decommission a stage II vapor recovery system shall not apply to political subdivisions. If a political subdivision that owns a stage II system chooses to decommission the equipment, such decommissioning shall comply with (b), above.