

Responses to the Legislative Commissioners' Office (LCO) Report on LRRC No. 2015-15

<i>LCO Comment</i>	<i>Action Taken in Response</i>
<b>Substantive Concerns</b>	
<p>1. On page 1, in section 22a-174-20(a)(7), the amended language makes it unclear whether the requirement that the external surface be either mill-finished aluminum or painted and maintained white is to be complied with upon the earlier of three events: (1) Upon the next painting of the tank, (2) March 7, 2024, or (3) upon being returned to service after being out of service, or whether such requirement applies upon the earlier of two events: (1) Upon the next painting of the tank, or (2) March 7, 2024 <u>and</u> always after being returned to service after being out of service. This provision should be rewritten to make the timing for this requirement clear.</p>	<p>To clarify the timing, section 22a-174-20(a)(7) has been revised to read as follows:</p> <p>(7) The external surfaces of any storage tank containing VOCs with a vapor pressure of 0.75 pounds per square inch or greater under standard conditions that has a maximum capacity of 2,000 gallons (7,570 liters) or greater and is exposed to the rays of the sun shall be either mill-finished aluminum or painted and maintained white upon the next painting of the tank[,] or [upon being returned to service after being out of service for the first time after the effective date of this subsection] <u>by March 7, 2024</u>, whichever is sooner[, and no less than 10 years after the effective date of this subsection, except the]. <u>The external surfaces of any storage tank that is brought into service after the effective date of this subdivision, that has a maximum capacity of 2,000 gallons or greater and that is exposed to the rays of the sun shall be either mill-finished aluminum or painted and maintained white prior to being filled with any VOC with a vapor pressure of 0.75 pounds per square inch or greater under standard conditions. The requirement to use mill-finished aluminum or white paint shall not apply to words and logograms applied to the external surface of the storage tank for purposes of identification provided such symbols do not cover more than 20 percent of the external surface area of the tank's sides and top or more than 200 square feet (18.6 square meters), whichever is less.</u></p>
<p>2. On page 2, in section 22a-174-20(b)(10)(A), the revised language implies that the owner or operator of a delivery vehicle is also responsible for the design of such vehicle by requiring such owner or operator to "<i>design</i>...the delivery vehicle to be vapor-tight at all times". Previously, this section required such owner or operator to <i>ensure</i> that such vehicle is "<i>designed to</i>...be vapor-tight at all times". If the owner or operator did not actually design such vehicle, it is unclear how such person could comply with this new requirement. Conversely, an owner or operator could <i>ensure</i> that such vehicle is <i>designed to</i> be vapor-tight at all times by conducting a review of the specifications for such vehicle.</p>	<p>To make it clear that the owner/operator has responsibility for ensuring that the design of the vehicle is adequate, but is not responsible for the design of the vehicle, section 22a-174-20(b)(10)(A) has been revised to read as follows:</p> <p>(A) <u>Ensure that</u> the delivery vehicle is <u>designed, operated and maintained</u> to be vapor-tight at all times;</p>

Technical Corrections	
1. On page 3, in section 22a-174-20(b)(12)(D), " <u>from the date of such tests</u> " should be inserted after " <u>years</u> " and " <u>shall be</u> " should be " <u>are</u> ", for clarity.	The recommended revision has been made.
2. On page 3, throughout section 22a-174-20(b)(14), " <u>or retest</u> " should be inserted after "test", for accuracy.	The recommended revision has been made.
3. On page 5, in section 22a-174-30a(a)(8), ". Components of a gasoline storage tank include, but are not limited to," should be ", including, but not limited to," for proper form.	The recommended revision has been made.
4. On page 6, in section 22a-174-30a(b)(1), "monthly throughput of 10,000 gallons is exceeded," should be "GDF ever exceeds a monthly throughput of 10,000 gallons," for clarity and consistency.	The recommended revision has been made.
5. On page 6, in the sixth line of section 22a-174-30(b)(4), "Commissioner" should be "Commissioner or the Administrator", for consistency.	The recommended revision has been made.
6. On page 7, in the first line of section 22a-174-30a(c)(6), "(1 through (5)" should be "(1 to (5), inclusive," for proper form, in the fourth line of said section, "exceeds" should be "ever exceeds" for clarity and consistency, and in the sixth line of said section, "shall always" should be "shall thereafter", for clarity and consistency.	The recommended revision has been made.
7. On page 9, in section 22a-174-30a(d)(9) and (10), "of any GDF" should be inserted after "owner or operator", for consistency.	The recommended revision has been made.
8. On page 9, in section 22a-174-30a(e)(1)(A), "that term is" should be deleted as it unnecessary.	The recommended revision has been made.
9. On page 10, in section 22a-174-30a(e)(1)(F), "of gasoline" should be deleted as it is unnecessary.	The recommended revision has been made.
10. On page 10, in the third line of section 22a-174-30(e)(3), "Commissioner" should be "Commissioner or the Administrator", for consistency.	The recommended revision has been made.
11. On page 10, in section 4, the text of said section should not be in bold type, for proper form and conforming changes to the Regulations of Connecticut State Agencies need to be made in the following sections in order to eliminate the reference to section 22a-174-30 which is being repealed: 22a-174-3a(a)(2)(B)(v), 22a-174-20ee and 22a-174-32(b)(3)(E)(ii).	Bolding has been removed as recommended. We note that reference to RCSA section 22a-174-30 must be removed from sections 22a-174-3a(a)(2)(B)(v), 22a-174-20ee and 22a-174-32(b)(3)(E)(ii) and will do so in a future action.

State of Connecticut  
REGULATION  
of the

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NAME OF AGENCY:

Energy and Environmental Protection

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**Concerning**

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SUBJECT MATTER OF REGULATION:

**Amendment of Section 22a-174-20**  
**Repeal of Section 22a-174-30**  
**Adoption of Section 22a-174-30a**  
**of the**  
**Regulations of Connecticut State Agencies (RCSA)**  
**Control of Organic Compound Emissions**

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**Section 1. Subdivision (7) of subsection (a) of section 22a-174-20 of the Regulations of Connecticut State Agencies is amended to read as follows:**

(7) The external surfaces of any storage tank containing VOCs with a vapor pressure of 0.75 pounds per square inch or greater under standard conditions that has a maximum capacity of 2,000 gallons (7,570 liters) or greater and is exposed to the rays of the sun shall be either mill-finished aluminum or painted and maintained white upon the next painting of the tank[,] or [upon being returned to service after being out of service for the first time after the effective date of this subsection] by March 7, 2024, whichever is sooner[, and no less than 10 years after the effective date of this subsection, except the]. The external surfaces of any storage tank that is brought into service after the effective date of this subdivision, that has a maximum capacity of 2,000 gallons or greater and that is exposed to the rays of the sun shall be either mill-finished aluminum or painted and maintained white prior to being filled with any VOC with a vapor pressure of 0.75 pounds per square inch or greater under standard conditions. The requirement to use mill-finished aluminum or white paint shall not apply to words and logograms applied to the external surface of the storage tank for purposes of identification provided such symbols do not cover more than 20 percent of the external surface area of the tank's sides and top or more than 200 square feet (18.6 square meters), whichever is less.

**Sec 2. Subdivisions (6) through (16) of subsection (b) of section 22a-174-20 of the Regulations of Connecticut State Agencies are amended to read as follows:**

(6) [By December 31, 1982, any person who owns or operates any dispensing facility with a stationary storage tank for gasoline having a capacity of more than two thousand (2,000) gallons and a throughput of ten thousand (10,000) gallons or more per thirty (30) day period shall install at each stationary storage tank an approved control system. The applicability of this subdivision shall be based upon a thirty day rolling average and once a loading facility exceeds this limit, the requirements of this subdivision shall always apply.] Reserved.

(7) [After December 31, 1982, no person shall install any stationary storage tank for gasoline with a capacity of more than two hundred fifty (250) gallons and a throughput of ten thousand (10,000) gallons or more per thirty (30) day period unless the tank has an approved control system. The throughput of a loading facility shall be based upon a thirty day rolling average and once a loading facility exceeds this limit, the requirements of this subdivision shall always apply.] Reserved.

(8) [Effective May 31, 1983, no person shall transfer or allow the transfer of gasoline from a delivery vehicle to a stationary storage tank subject to the provisions of subdivisions (6) or (7) of this subsection unless:

- (A) the transfer is made through a properly maintained and operated approved control system which is in good working order, connected and operating; and
- (B) there are no leaks in pressure/vacuum relief valves and hatch covers of the delivery vehicle, nor in the truck tanks, storage tank or associated vapor and liquid lines during loading or unloading.] Reserved.

(9) [No person shall dispense gasoline to a stationary storage tank having an approved control system in such a manner as to impair the collection efficiency of the control system.] Reserved.

(10) The owner or operator of a delivery vehicle shall [ensure that]:

- (A) Ensure that the delivery vehicle is designed, operated and maintained to be vapor-tight at all times;
- (B) Keep [the] all hatches [are] on the delivery vehicle closed and securely fastened at all times during loading and unloading operations;
- (C) Set the pressure relief valves [are set] to release at no less than 0.7 pounds per square inch; [and]
- (D) Refill the vapor laden delivery vehicle [is refilled] only at facilities which meet the requirements of subdivisions (2) or (5) of this subsection[.];
- (E) Properly connect all hoses in the vapor balance system prior to loading and unloading;
- (F) Maintain all vapor return hoses, couplers and adapters used in gasoline delivery to be vapor-tight;
- (G) Ensure all delivery vehicle vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the dispensing facility storage tank;
- (H) Dispense gasoline to a stationary storage tank having an approved control system in a manner that does not interfere with the collection efficiency of the control system;
- (I) Load and unload in a manner that does not cause the delivery vehicle tank to be subject to a pressure in excess of 18 inches of water or a vacuum in excess of 6 inches of water; and
- (J) Not transfer or allow the transfer of gasoline from a delivery vehicle to a dispensing facility stationary storage tank if there are leaks in pressure/vacuum relief valves or hatch covers of the delivery vehicle, in the truck tanks or in associated vapor and liquid lines.

(11) [The Commissioner may provide an exemption to the provisions of subdivisions (5) or (6) of this subsection for economic or technological impracticability. Any exemption granted under this subdivision shall require the approval of the Administrator.] Reserved.

(12) Any owner or operator of a delivery vehicle that receives gasoline from a loading facility described in subdivisions (2) or (5) of this subsection or delivers gasoline to a dispensing facility subject to the provisions of [subdivisions (6) or (7) of this subsection] section 22a-174-30a of the Regulations of Connecticut State Agencies [or any loading facility subject to subdivision (5) of this subsection] shall not cause or permit [a] such delivery vehicle to load or unload gasoline unless:

- (A) [such] The owner or operator tests the tank on such delivery vehicle once every twelve (12) months in accordance with Method 27 as set forth in Appendix A of Title 40 [Code of Federal Regulations Part] CFR 60 or another manner accepted by the Administrator and approved by the Commissioner in accordance with section 22a-174-5 of the Regulations of Connecticut State Agencies;
- (B) [Repealed;
- (C) during] During the test specified in subparagraph (A) of this subdivision, the tank sustains a pressure change of no more than three (3) inches of water in five (5) minutes when pressurized to a gauge pressure of eighteen (18) inches of water or when evacuated to a gauge pressure of six (6) inches of water; [and]
- ~~[(D)]~~(C) [the] The delivery vehicle displays a marking near the U.S. Department of Transportation markings required by Title 49 [of the Code of Federal Regulations Section] CFR 177.824 which shows the initials “DEEP” or “DEP” and the date of the last test or comparable markings as required by either the Connecticut Department of Transportation or the Connecticut Department of Motor Vehicles[.]; and
- (D) Records of all tests performed under this subdivision are maintained for a minimum of five (5) years from the date of such tests and made available to the Commissioner within three (3) business days after the Commissioner requests such records.

(13) The owner or operator of any delivery vehicle [which] that fails to meet the requirements of [subdivisions] subdivision (12) [or (14)] of this subsection shall repair and retest such vehicle within fifteen (15) days or take such vehicle out of service. Prior to returning such vehicle to service, the owner or operator shall repair and retest the vehicle.

(14) Any person who performs a test or retest required by subdivision (12) or (13) of this subsection shall[:

- (A)] notify the Department's [Air Compliance Unit] Bureau of Air Management, Field Operations Section of the time and location of the test or retest at least forty-eight (48) hours in advance[; and
- (B) submit a copy of the test report to the Commissioner within ten (10) days after performing a test].

- [(D) maintain such records at the subject facility for a period of five [(5)] years, and provide such records to the commissioner upon request.]

**Sec. 3. The Regulations of Connecticut State Agencies are amended by adding section 22a-174-30a as follows:**

**(NEW)**

**Section 22a-174-30a. Stage I Vapor Recovery.**

**(a) Definitions.** For the purposes of this section, the definitions provided in this subsection shall apply. Terms used in this section that are not defined in this subsection are as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.

- (1) “CARB” means the State of California Air Resources Board;
- (2) “CARB-approved” means a Stage I vapor recovery system or system component that is or has been tested and approved by CARB as an individual component or as part of an approved system or that is or has been tested and approved by another state using testing methods approved by CARB;
- (3) “Construct” means to install or replace all storage tanks with a capacity greater than 250 gallons, the product piping and the vent piping at a GDF during a single project;
- (4) “Delivery elbow” means a quick connect/disconnect type coupler that joins a hose from a delivery vehicle to a GDF’s storage tank riser pipe adaptor or coupler;
- (5) “Delivery vehicle” means a tank truck, tank-equipped trailer, railroad tank car, or other mobile source equipped with a storage tank used for the transportation of gasoline from a source of supply to any stationary storage tank;
- (6) “Gasoline” means any petroleum distillate or petroleum distillate and alcohol blend commercially known or sold as “gasoline” and commonly used as an internal combustion engine fuel;
- (7) “Gasoline dispensing facility” or “GDF” means any site where gasoline is transferred to motor vehicles from a stationary storage tank with a capacity of 250 gallons or more;
- (8) “Modified” means the addition, alteration, replacement or retrofit of a gasoline storage tank located at a GDF or any component fixed to such gasoline storage tank including, but not limited to, piping that contains gasoline or gasoline vapors and containments located over or on the gasoline storage tank;
- (9) “Stage I vapor recovery system” means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading delivery vehicle and a receiving

GDF storage tank such that vapors displaced from the GDF storage tank are transferred to the delivery vehicle tank;

- (10) "Throughput" means the number of gallons of gasoline delivered into motor vehicles at a GDF over a specified period of time;
- (11) "Two-point Stage I vapor recovery system" means a GDF storage tank possessing an entry port for a gasoline fill pipe and a separate exit port for a vapor-return connection; and
- (12) "Vapor-tight" means not capable of allowing the passage of gases at the pressures encountered.

**(b) Applicability.**

- (1) This section applies to the owner or operator of any GDF that has a monthly throughput of 10,000 gallons or more on or after July 1, 2015. If a GDF ever exceeds a monthly throughput of 10,000 gallons, the requirements of this section shall thereafter apply.
- (2) Monthly throughput shall be calculated by adding the volume of gasoline dispensed at the GDF during the current day with the volume of gasoline dispensed at the GDF during the previous 364 days, and dividing that sum by 12. For any GDF constructed after July 1, 2014, the initial calculation of monthly throughput shall be performed on or after 365 days after the date the GDF starts dispensing gasoline to motor vehicles.
- (3) For a GDF with multiple storage tanks, the requirements of this section apply only to a storage tank with a capacity of 250 gallons or greater.
- (4) The owner or operator of a GDF that does not meet the monthly throughput requirements of subdivision (1) of this subsection shall maintain a chronological register of daily throughput of gasoline to demonstrate that this section does not apply. Such records shall be maintained for five (5) years from the date of creation and be made available to the Commissioner or the Administrator upon request. An owner or operator shall make records available to the Commissioner or the Administrator no later than three (3) business days after receiving such a request.

**(c) Requirements.**

- (1) No owner or operator of a GDF shall transfer or allow the transfer of gasoline between a delivery vehicle and a GDF stationary storage tank unless such stationary storage tank is equipped with a Stage I vapor recovery system that includes:
  - (A) A CARB-approved fill adapter; and
  - (B) A pressure/vacuum vent valve on each GDF storage tank vent pipe.
- (2) Any pressure/vacuum vent valve installed on and after July 1, 2015 shall be a CARB-approved pressure/vacuum vent valve.

- (3) The pressure specifications for any pressure/vacuum vent valve shall be as follows:
  - (A) For any pressure/vacuum vent valve installed prior to July 1, 2015:
    - (i) A positive pressure setting of:
      - (I) 3.0 inches of water, plus or minus 0.5 inch, or
      - (II) 2.5 to 6.0 inches of water, and
    - (ii) A vacuum setting of 8.0 inches of water, plus or minus 2.0 inches; and
  - (B) For any pressure/vacuum vent valve installed on and after July 1, 2015:
    - (i) A positive pressure setting of 2.5 to 6.0 inches of water,
    - (ii) A negative pressure setting of 6.0 to 10.0 inches of water, and
    - (iii) The total leak rate of all pressure/vacuum vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
- (4) Except as provided in subdivision (5) of this subsection, a GDF storage tank shall be equipped with a two-point Stage I vapor recovery system. The vapor exit port of the two-point Stage I vapor recovery system shall be designed and maintained to seal in a manner that will prevent the discharge of gasoline vapors to the atmosphere when the vapor return hose is disconnected.
- (5) An owner or operator of any GDF storage tank that does not have an available port to install a two-point Stage I vapor recovery system shall install a two-point Stage I vapor recovery system when the GDF storage tank is replaced or when the product in the tank is switched from any other fuel to gasoline.
- (6) In addition to the requirements of subdivisions (1) to (5), inclusive, of this subsection, an owner or operator of any GDF that has a monthly throughput of 100,000 gallons or more shall install, operate and maintain a Stage I vapor recovery system that meets the requirements of subparagraphs (A) through (F) of this subdivision. If a GDF ever exceeds a monthly throughput of 100,000 gallons, the requirements of this subdivision shall thereafter apply.
  - (A) All vapor line connections on the GDF storage tank shall be equipped with closures that seal upon disconnect;
  - (B) The Stage I vapor control system shall be designed such that the pressure in the delivery vehicle tank does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer;

*Systems of Dispensing Facilities*, as may be revised from time to time, or another test method approved by the Commissioner and the Administrator.

- (6) The owner or operator of any GDF subject to 40 CFR 63.11120 may use the test methods specified in 40 CFR 63.11120 in lieu of the method specified in subdivision (4) or subdivision (5) of this subsection.
- (7) Vapor-space tie-in tests shall be conducted according to the current version of CARB TP-201.3C, *Determination of Vapor Piping Connections to Underground Gasoline Storage Tanks (Tie-Tank Test)*, as may be revised from time to time, or another method test approved by the Commissioner and the Administrator.
- (8) The owner or operator of any GDF who has installed a pressure management or vapor control device on a storage tank with a capacity of 250 gallons or greater, other than a device that is required to be installed and tested by this section, shall test such device annually by a method approved by the commissioner. At least sixty (60) days prior to conducting an annual test, the owner or operator shall submit a test protocol for review and approval on a form provided by the commissioner.
- (9) Any owner or operator of any GDF shall:
  - (A) Notify the Department's Bureau of Air Management, Field Operations Section in writing of the time and location of a test required by this subsection at least seven (7) business days in advance; and
  - (B) Submit a copy of the test report on a form provided by the Department to the Department's Bureau of Air Management, Field Operations Section within ten (10) days after performing a test required by this subsection.
- (10) If an owner or operator of any GDF fails any test required by this subsection, the owner or operator shall take corrective actions and retest no later than sixty (60) days after failing the test.

**(e) Record keeping.**

- (1) Any owner or operator of a GDF shall maintain the following records:
  - (A) All licenses, as defined in section 4-166 of the Connecticut General Statutes, to construct or operate the GDF or to construct or operate a specific system at the GDF;
  - (B) All records and results of tests performed pursuant to subsection (d) 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 I vapor recovery system, including a description of the maintenance or repair performed, identification of any part repaired or replaced on such Stage I vapor recovery system, the dates the maintenance or repair was performed, and a general description of the location of any part repaired or replaced;

- (D) A chronological file of all inspection reports issued by a representative of the Commissioner or the Administrator for inspections performed at the GDF;
  - (E) A chronological file of all compliance records, including orders, warnings and notices of violations, issued by a representative of the Commissioner or the Administrator; and
  - (F) A chronological register of daily throughput.
- (2) In addition to the applicable records required by subdivision (1) of this subsection, any owner or operator of a GDF constructed after July 1, 2014 shall maintain records of the dates of the construction and the date gasoline was first dispensed to a motor vehicle.
  - (3) Records required by this subsection shall be made available to the Commissioner or the Administrator upon request. An owner or operator shall make records available to the Commissioner or the Administrator no later than three (3) business days after receiving such a request.
  - (4) Records shall be maintained for five (5) years from the date of creation.
  - (5) An owner or operator shall display in a conspicuous location at the GDF the address at which the records required by subdivision (1) of this subsection are maintained.

**Sec. 4.** As of July 1, 2015, section 22a-174-30 of the Regulations of Connecticut State Agencies is repealed.