



What do I need to know about the Stage I Vapor Recovery Regulation?



On July 8, 2015, the new Stage I Vapor Recovery regulation, [Section 22a-174-30a](#) of the Regulations of Connecticut State Agencies (RCSA) became effective. The new regulation replaces former RCSA Section 22a-174-30, the Dispensing of Gasoline/Stage I and Stage II Vapor Recovery regulation, and updates the existing requirements relating to the control of VOC emissions from Gasoline Dispensing Facilities (GDFs) set out in 2013 by the Connecticut General Statutes (CGS) [Public Act No. 13-120](#). Complying with the Stage I Vapor Recovery Regulation is essential to protect both your community's health and the environment. To help you get started, we've included a summary of requirements under this rule.

For additional information, please visit www.ct.gov/deep/stage1. If you have any questions, please contact Kathleen Rankin at 860-424-3473 or kathleen.rankin@ct.gov.

Summary of Requirements for Stage I Vapor Recovery at a Gasoline Dispensing Facility (GDF)

Applicability

Applicability is now based on a GDF's **monthly gasoline throughput**, which is calculated by adding the quantity of gasoline dispensed in any consecutive 365 day period and dividing by 12.

- GDFs with a **monthly gasoline throughput** of more than 10,000 gallons since 7/1/2014 are subject to the new Stage I requirements.
- GDFs with a **monthly gasoline throughput** of less than 10,000 gallons per month are required to keep a chronological register of daily gasoline throughput to demonstrate this section does not apply. Such records shall be kept for 5 years from the date of creation.

Equipment Requirements

- GDFs must have CARB-approved swivel fill adapters, and each storage tank vent pipe must have a pressure/vacuum (P/V) vent valve. P/V vent valves installed after 7/1/2015 must be CARB-approved.
- Equip all storage tanks with a two-point Stage I vapor recovery system in which the exit port is designed and maintained to seal when the vapor return line is disconnected in order to prevent the discharge of gasoline vapors. If a port is not available to install a two-point system, one must be installed when the tank is replaced or the product in the tank is switched from any other fuel to gasoline.

Annual Testing

Conduct pressure decay, vapor space tie-in, and P/V vent valve tests at least once per calendar year in accordance with the following:

- Pressure decay, vapor space tie-in, and P/V vent valve tests must be done according to the current version of respective CARB test procedures, TP-201.3, TP-201.3C, and TP-201.1E.
- Pressure, vacuum, and leak rate tests must be conducted for each P/V vent valve. The positive cracking pressure range has been widened to 2.5 to 6.0 inches of water, the negative cracking pressure range is 6.0 to 10.0 inches of water. Combined total leak rate of all P/V vent valves, including connections, shall not exceed 0.17 cubic foot/hour at a pressure of 2.0 inches of water and 0.63 cubic foot/hour at a vacuum of 4.0 inches of water.
- Stations newly constructed or modified after 7/1/2015 must conduct the tests listed above within 60 days of initial operation or completion of modification.
- If you have 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, test such device annually. Submit a test protocol for approval at least 60 days prior to such test.
- If a GDF fails a pressure decay, vapor space tie-in or P/V vent cap test, take corrective actions and retest no later than 60 days after failing the test.

Notification Requirements

(Forms available at www.ct.gov/deep/stageI)

- Notify the Department in writing of the time and location of a required test at least 7 business days in advance. Submit notifications to air.vapor.program@ct.gov with the following in the subject line: "Pressure Decay Test Notification, Station Name, Street Address, Town, and Retail Gasoline Dealer's License #".
- Submit all test reports (on the form provided) to air.vapor.program@ct.gov with the following in the subject line: "Stage I Test Results, Station Name, Street Address, Town, and Retail Gasoline Dealer's License #".

Recordkeeping Requirements

- Maintain the following records: licenses to construct/operate the GDF, results of tests performed pursuant to RCSA Section 22a-174-30(a), records of maintenance and repairs conducted on the Stage I system, and a chronological file of all inspection reports, compliance records and a register of daily throughput.
- Maintain records for 5 years and make available to the Commissioner no later than 3 business days after receiving such a request.
- Display the address where records are maintained in a conspicuous location.

Additional Requirements

For stations with a monthly throughput of **100,000 gallons** or more per month:

- Equip all vapor line connections on storage tanks with closures that seal upon disconnect.
- Stage I system shall be designed such that the pressure in the delivery vehicle does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
- Vapor recovery adaptors, product adaptors and the method of connection with the delivery elbow shall be designed to prevent overtightening or loosening of fittings during normal delivery operations.
- Gauge wells shall be equipped with a submerged drop tube extending the same distance from the bottom of the storage tank as the fill pipe, if separate from the fill tube.
- Equip liquid fill connections and vapor couplings with vapor-tight caps.
- Stage I system must be capable of meeting the static pressure performance requirement when pressure decay testing is performed.

Please Note - This fact sheet does not address any requirements you may have or be subject to for the DEEP [Underground Storage Tank \(UST\) Program](#). If you have any questions relating to those requirements, please contact the UST Program at (860) 424-3374.