



Stage I Gasoline Vapor Recovery Testing Guidance for Owners of Gasoline Dispensing Facilities

Q: How do I know if I am required to perform Stage I vapor recovery testing at my gasoline dispensing facility (GDF)?

A: If the amount of gasoline pumped (throughput) by a GDF, averaged over 12 months, equals or exceeds 100,000 gal/month, testing of the Stage I system is required every three years.

Starting with 2014, if a GDF ever exceeds 100,000 gal/month, averaged over 12 months, it remains subject to the testing requirement even if the 12 month average throughput later drops below 100,000 gal/month. If gasoline throughput at a GDF has been less than 100,000 gal/month and then increases to equal or exceed that average, the first test is due by the end of the calendar year following the year when throughput first exceeded 100,000 gal/month. Testing of Stage I vapor recovery controls is a requirement of both state and federal (Environmental Protection Agency) regulations.

Q: If I am subject to the testing requirement, what tests need to be performed?

A: There are two required tests – the pressure decay test on the entire storage tank system (tanks and vent lines) and a leak rate and cracking pressure test on the pressure/vacuum (P/V) valve(s) installed on the storage tank system vent riser(s).

The pressure decay test procedure specifies several conditions that must be met to conduct the test:

- at least three hours must have elapsed since the last gasoline delivery into the storage tanks; and,
- the total ullage (vapor space in the tanks or the volume not occupied by liquid gasoline), of all storage tanks combined, cannot exceed 25,000 gallons and the minimum ullage of each individual tank must be at least 1000 gallons or 25% of tank capacity, whichever is less; and,
- there must be a period of at least 30 minutes with no gasoline dispensed prior to the test.

Because pumping of gasoline during the test would appear to be a leak, no pumping can occur for the duration of the test. **This typically results in a minimum no pumping period of at least an hour**, but it can be longer if there are vapor leaks the testing technician has to locate and repair. Keeping your tank system well maintained will help to minimize the amount of GDF down time during testing.

The requirement to perform testing at GDFs can be found in §5-253.5 of the Air Pollution Control Regulations (Stage I Vapor Recovery Controls at Gasoline Dispensing Facilities).

If you have questions about Stage I testing requirements contact Dave Shepard at 802-272-4088 or dave.shepard@vermont.gov or Brian Monroe at 802-338-2047 or brian.monroe@vermont.gov of the Air Quality & Climate Division.