2.42 Bulk Gasoline Terminals

2.42.1 Applicability and Designation of Affected Facility

The affected facility to which the provisions of this section apply is the total of all the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks.

2.42.2 Test Methods and Procedures

(a) In conducting the performance tests required in Section 1.2, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in Section 1.2(b). The three-run requirement of Section 1.2(f) does not apply to this source category.

(b) Immediately before the performance test, the owner or operator shall use Method 21 to monitor for leakage of vapor all potential sources in the terminal’s vapor collection system equipment while a gasoline tank truck is being loaded. The owner or operator shall repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test.

(c) The owner or operator shall determine compliance with the standards as follows:

(1) The performance test shall be 6 hours long during which at least 300,000 liters of gasoline is loaded. If this is not possible, the test may be continued the same day until 300,000 liters of gasoline is loaded or the test may be resumed the next day with another complete 6-hour period. In the latter case, the 300,000-liter criterion need not be met. However, as much as possible, testing should be conducted during the 6-hour period in which the highest throughput normally occurs.

(2) If the vapor processing system is intermittent in operation, the performance test shall begin at a reference vapor holder level and shall end at the same reference point. The test shall include at least two startups and shutdowns of the vapor processor. If this does not occur under automatically controlled operations, the system shall be manually controlled.

(3) The emission rate (E) of total organic compounds shall be computed using the following equation:

\[ E = K \sum_{i=1}^{n} \left( V_{esi} C_{ei} \right)/(L \times 10^{6}) \]

Where:

- \( E \) = emission rate of total organic compounds, mg/liter of gasoline loaded.
- \( V_{esi} \) = volume of air-vapor mixture exhausted at each interval “i”, scm.
- \( C_{ei} \) = concentration of total organic compounds at each interval “i”, ppm.
- \( L \) = total volume of gasoline loaded, liters.
- \( n \) = number of testing intervals.
- \( i \) = emission testing interval of 5 minutes.
- \( K \) = density of calibration gas, 1.83x10^4 for propane and 2.41x10^5 for butane, mg/scm.

(4) The performance test shall be conducted in intervals of 5 minutes. For each interval “i”, readings from each measurement shall be recorded, and the volume exhausted (\( V_{esi} \)) and the corresponding average total organic compounds concentration (\( C_{ei} \)) shall be determined. The sampling system response time shall be considered in determining the average total organic compounds concentration corresponding to the volume exhausted.
(5) The following methods shall be used to determine the volume \( (V_{ei}) \) air-vapor mixture exhausted at each interval:

(i) Method 2B shall be used for combustion vapor processing systems.

(ii) Method 2A shall be used for all other vapor processing systems.

(6) Method 25A or 25B shall be used for determining the total organic compounds concentration \( (C_{ei}) \) at each interval. The calibration gas shall be either propane or butane. The owner or operator may exclude the methane and ethane content in the exhaust vent by any method (e.g., Method 18) approved by the Director.

(7) To determine the volume \( (L) \) of gasoline dispensed during the performance test period at all loading racks whose vapor emissions are controlled by the processing system being tested, terminal records or readings from gasoline dispensing meters at each loading rack shall be used.

(d) The owner or operator shall determine compliance with the standard in §§60.502(h) as follows:

(1) A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500mm of water gauge pressure with \( \pm 2.5\text{mm} \) water precision, shall be calibrated and installed on the terminal’s vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.

(2) During the performance test, the pressure shall be recorded every 5 minutes while a gasoline truck is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.
leak).

(3) Leak determination method.

(4) Corrective Action (date each leak repaired; reasons for any repair interval in excess of 15 days).

(5) Inspector Name and Signature.

(d) The terminal owner or operator shall keep documentation of all notifications required of new sources on file at the terminal for at least 2 years.

(e) [Reserved]

(f) The owner or operator of an affected facility shall keep records of all replacements or additions of components performed on an existing vapor processing system for at least 3 years.

*Code of Federal Regulations, Title 40, Part 60.