

Ohio EPA

Division of Air Pollution Control

Engineering Guide #8

Question:

Are compliance tests required for all vapor control systems installed at bulk gasoline terminals? What constitutes an acceptable compliance test? Under what conditions will the Ohio EPA allow exceptions to the requirement for "three eight-hour test repetitions," as specified in paragraph (E)(5)(a) of rule 3745-21-10? (These questions on compliance testing at bulk gasoline terminals were submitted by Mr. Bob Miles, of the Central District Office, on March 7, 1980.)

Response:

1. Are compliance tests required for all vapor control systems installed at bulk gasoline terminals?

The compliance test method for OAC rule 3745-21-09(Q) is specified in OAC rule 3745-21-10(E). This rule indicates that the compliance test method is the method specified in NSPS Subpart XX (Standards of Performance for Bulk Gasoline Terminals).

Emission tests are not required for all vapor control systems. According to 40 CFR 60.503, emission tests are not required for bulk gasoline terminals that employ flares, as defined in 40 CFR 60.501, and the flares meet the requirements in 40 CFR 60.18(b) through (f). Emission tests are required for all other types of vapor control systems installed at bulk gasoline terminals.

Emission tests at another terminal with a similar vapor control system cannot be used in place of an actual test at the terminal under evaluation. Similarly, engineering design and installation data cannot be used in place of an emission test. Each vapor control system is a complex integration of various equipment components (pumps, automatic valves, carbon adsorption beds, compressors, etc.), and each system is designed according to the operating specifications for the terminal at which it is installed.

The Ohio EPA believes that periodic emission tests, at each terminal where a vapor control system has been installed, are necessary in order to adequately demonstrate compliance with OAC rule 3745-21-09(Q). The frequency of emission testing should be at least once per permit term. If the results of the emission tests indicate marginal compliance (i.e., the tested emission rate is at least 80% of the allowable emission rate), the testing frequency should be increased to twice per permit term, or once every 2.5 years.

2. What constitutes an acceptable compliance test?

As specified in OAC rule 3745-21-10(E), an acceptable compliance test is one that complies with the methods and procedures contained in 40 CFR, section 60.503(b), (c), (e) and (f) of "Subpart XX - Standards of Performance for Bulk Gasoline Terminals," except that the gasoline throughput during any test shall be not less than ninety percent of the maximum throughput of the loading rack(s) and not less than eighty-thousand gallons.

3. Under what conditions will the Ohio EPA allow exceptions to the requirement for "three eight-hour test repetitions," as specified in paragraph (E)(5)(a) of rule 3745-21-10?

The OAC rule citation concerning eight-hour repetitions has been eliminated. In accordance with NSPS Subpart XX and OAC rule 3745-21-09(E), an acceptable compliance test shall be 6 hours long, during which the gasoline throughput shall be not less than ninety percent of the maximum throughput of the loading rack(s) and not less than eighty-thousand gallons. If the maximum throughput is not achievable, the test may be continued the same day until at least eighty-thousand gallons of gasoline are loaded, or the test may be repeated the next day with another complete 6-hour period. In the latter case, the criteria concerning ninety percent of the maximum throughput and at least eighty-thousand gallons need not be met; however, the testing should be conducted during the 6-hour period during which the highest throughput normally occurs.

JH/BJ/JO/MM/rt

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