

Ohio EPA

Division of Air Pollution Control

Engineering Guide #16

Question:

If an emission test was conducted for an emissions unit to demonstrate compliance with an applicable emission limitation and a permit was subsequently issued, when should the Agency require that additional stack testing be conducted to demonstrate ongoing compliance? (This question was submitted by Dennis Bush of the Northeast District Office on July 24, 1980.)

Answer:

Under Section 3704.03(A) of the Ohio Revised Code (ORC), the Director has the authority to develop programs for the prevention, control, and abatement of air pollution. ORC Section 3704.03(I) provides that the Director may require "the owner or operator of an air contaminant source to...sample those emissions at such locations, at such intervals, and in such manner as the director prescribes; to maintain records and file periodic reports with the director containing information as to...rate, duration, and composition of emissions, and any other pertinent information the director prescribes."

The Director has exercised this authority by enacting rule 3745-15-04(A) of the Ohio Administrative Code (OAC) which explicitly states that "the director may require any persons responsible for emission of air contaminants to make or have made tests to determine the emission of air contaminants from any source whenever the director has reason to believe that an emission in excess of that allowed by these rules is occurring or has occurred from time to time." Therefore, as a general rule, the Director may require that a stack test be conducted whenever there are reasonable grounds for believing that an emission limitation is being (or has been) violated.

It is not possible to develop a rule that will specifically address every possible situation that may arise, but there are general guidelines that can be used in determining whether or not to require additional stack testing pursuant to OAC rule 3745-15-04. In general, additional stack testing should be required for any of the following reasons:

- (1) Opacity readings (including data from continuous emissions monitoring) indicate exceedances of the permit allowables, applicable regulations, or opacity levels determined during previous compliance tests.
- (2) Operations are determined to be a nuisance and/or are generating complaints; and, as a result, it is necessary to determine the compliance status of the affected emissions unit(s) with the applicable rules and/or permit requirements.

- (3) It has been determined that there have been continual and excessive malfunctions of control equipment or that there is an apparent degradation in the efficiency of the control equipment. In either case, the capability of the control equipment to ensure continued compliance becomes questionable.
- (4) If an emissions unit has been modified pursuant to OAC rule 3745-31-02, emission testing may be necessary to demonstrate continued compliance with applicable rules and permit requirements.
- (5) It has been discovered that errors were made in previously evaluating the compliance status of an emissions unit.

The above list of reasons is not exhaustive. In general, an emission test is warranted, and may be required pursuant to OAC rule 3745-15-04, whenever there is a legitimate reason to believe that an exceedance of an allowable emission limit of the OAC or federal regulations is occurring or has occurred. The decision to require additional emissions testing normally will be made by the District Office (DO) or local air agency (LAA).

Pursuant to ORC 3704.03(I), additional emission tests may be required prior to the renewal of an operating permit (Title V or State PTIO) to confirm continued compliance with an applicable emission limitation and/or control requirement. With the advent of the Title V permit program, there is now a greater burden for a permittee to establish a detailed monitoring, recordkeeping, and reporting program for significant emissions units to ensure ongoing compliance with the applicable emission limitations and control requirements. With the greater emphasis on such programs, the DAPC believes that the frequency of emission testing, for permit renewal purposes, can be reduced. The recommended emission testing frequencies for “major” and “non-major emissions units” are given in the attached Figure I. A testing frequency greater than that illustrated in Figure I may be warranted based on State and/or federal regulations, or if deemed appropriate by DO/LAA personnel.

For purposes of applying Figure I, the following definitions are provided:

1. For any emissions unit that is equipped with a certified continuous emission monitoring system (CEMS) that monitors the pollutant being tested and/or employs a detailed monitoring, recordkeeping, and reporting (MR&R) program, “marginal compliance” means that during the last emission test, the actual emission rate was greater than 90% of the allowable emission rate (AER).
2. For any emissions unit that does not employ a CEMS and is not required to employ a detailed MR&R program, “marginal compliance” means that during the last emission test, the actual emission rate was greater than 80% of the AER.
3. “Major emissions unit” is one that has an actual emission rate equal to or greater than 25 TPY of any criteria pollutant or 5 TPY of any hazardous air pollutant (HAP).

4. “Non-major emissions unit” is one that has an actual emission rate less than 25 TPY of any criteria pollutant and 5 TPY of any HAP.

BW/CS/JO/TS

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Figure I Testing Frequency Flow Chart

