

GENERAL TESTING AND REPORTING REQUIREMENTS

Ohio EPA requires that an Ohio Intent to Test ("ITT") form be filed with the appropriate Ohio EPA representative at least 30 days (or more if required by regulation) prior to the testing event. If a test witness is required by Ohio EPA, witnesses are scheduled on a first-come-first-served basis, so test date flexibility may be necessary. Ohio EPA expects to see the required testing and sample recovery/analysis performed per the applicable methods, without any modifications. If ANY modification to the specified test methods, as published, is planned, the modification is required to be detailed in the ITT with justification as to why the modification is necessary. **Alternate procedures spelled out within a given method are considered modifications, and must also be noted on the ITT.** All proposed modifications are subject to the approval of Ohio EPA, and depending on the nature of the modification, Ohio EPA may require the testing company or facility to obtain written approval of the modification from USEPA. Do not expect Ohio EPA to approve any modifications on-site, or without adequate advance notice.

Incomplete ITTs may be returned for more information.

Below are commonly overlooked testing and reporting requirements. Please review test methods being proposed in the ITT for a complete listing of the requirements that are expected to be met.

TEST EVENT REQUIREMENTS:

All testing

- All field data sheets are to be filled out in pen, not pencil.
- Correction fluid is not permissible on any data sheet. Changes or mistakes are to be corrected with a single line strikeout, and initialed by the person making the change.
- All applicable pre-survey work should be available for review on-site.
- Testing must be scheduled so it can be completed within a normal workday (8:00 am - 4:30 pm). At the discretion of Ohio EPA, other test times may be available, but must be pre-approved. In addition, Ohio EPA expects that testing must begin no later than 12:00 p.m. on the scheduled date, unless an alternative testing time has been pre-approved by Ohio EPA. It is the responsibility of the facility and the stack-testing consultant to ensure that this happens. If testing has not begun by noon, Ohio EPA staff may leave the facility unless, in their professional opinion, the start of testing is imminent. At the point when Ohio EPA staff leave the facility because testing has not begun, the testing shall be rescheduled to a mutually agreed upon date and time.
- Tests must be completed such that each applicable "units of the standard(s)" can be determined.
- All method required leak checks are expected to be completed pursuant to the method(s) being used.
- All Reference Method data being recorded electronically on site must be available in hard-copy form, or on media supplied by personnel completing the testing in a .PDF format.
- For testing that occurs with no Ohio EPA witness present, Ohio EPA reserves the right to require that a copy of all field data collected during a testing event be sent via email in a .PDF format within 24 hours of the end of the testing event.
- Test runs must be made consecutively (back to back), and completed within 24-hour of the start of the test, unless Ohio EPA has pre-approved an alternate test schedule.
- For emissions units that have multiple stacks or outlets, all stacks or outlets must be tested simultaneously for emissions rate determinations. Destruction efficiency determinations require all inlet and outlet points be tested simultaneously.
- It is understandable that a test may need to be postponed due to circumstances that would not allow representative conditions to be established, such as recent maintenance or modification, equipment failure, or the absence of key personnel. However, concern that a test will result in a determination of non-compliance is not a valid reason for postponement, and a facility decision to postpone without a valid reason may result in enforcement action against the facility.

Methods 1-4

- Stack diameter and sample point measurements must be available for review and verification on-site.
- Documentation of compliance with the specifications displayed in Figures 2-2, 2-3, 2-4, 2-7, and 2-8 of EPA Method 2 must be available for review on-site.
- The time of dry molecular weight analysis must be recorded per EPA Method 3, Section 8.2.4
- For emission rate corrections, O₂/CO₂ measurements are made utilizing an instrumental analyzer or an Orsat analyzer in which the time of analysis is recorded as per EPA Method 3B, Section 8.2.4.

- A meter box check must be performed prior to testing per Section 9.2 of Method 5, and a copy of the meter box calibration made available on-site.
- On-site determination of Method 4 moisture content is required.
- Good condition, indicating-type silica gel must be used for Method 4 moisture determinations. Water in the bottom of the silica gel impinger, or indications of breakthrough in the silica gel, will invalidate the associated test run.

Methods 5, 6, 8 and 29/Isokinetic

- Nozzles used during testing must be made available for on-site verification that Method 5, Section 6.1.1.1 specifications are being met.
- Paperwork indicating that thermocouple and barometric pressure readings are within Method 5 specifications must be available on-site and included in the test report.
- Filter temperature must be monitored by a thermocouple that is in contact with the sample gas stream per EPA Method 5, Section 6.1.1.7. This temperature must also be recorded at a frequency in keeping with other sample train temperatures.
- Equipment must be available to allow for the on-site recovery of the sample probe, impingers and the nozzle.
- All samples recovered for off-site analysis must be sealed and labeled, and a "record of custody" must be completed prior to leaving the site.
- Solutions must be labeled with preparation date and time to confirm compliance with EPA Method 6, Section 7.1.3 / Method 8 Section 7.1.4 / Method 29, Section 7.3.2 requirements.
- Probe temperatures must be recorded.

Method 7E

- On-site NOx converter check pursuant to Section 8.2.4 (or an Ohio EPA prior approved alternative NOx converter check) must be completed prior to each emissions unit-testing event.

Method 9

- Visible emission readers must have photo identification and a copy of their current Method 9 certification paperwork, available for review on-site.

Method 18

- Method 18 spike recoveries must be performed per the specification of the applicable section.
- Spike and recovery analysis must be performed for compliance methane analysis for subtraction from a total VOC number.

Method 25/25A

- The methodology selected for the measurement of VOC must be in accordance with USEPA Emission Measurement Center Guidance Document 033 (GD-033).

Method 26

- The filter temperature must be maintained at 248 degrees Fahrenheit or above.

All instrumental test methods

- Copies of all reference method calibration gas certifications must be available for review on-site. Ambient air, scrubbed or otherwise, will not be allowed for use as a calibration standard (zero air generators will be allowed, however.)
- If a calibration gas dilution system is utilized, Emission Measurement Technical information Center Test Method 205 (EMTIC TM-205) must be performed, on site, to validate system performance prior to testing. Calibration gas dilution systems shall not be used for 40 CFR Part 75 testing events.

Compliance testing using instrumental test methods 6C, 7E, 10 and 20 (and test method 3A when data is being used for anything other than molecular weight determinations)

- With the sample train in the testing configuration, response time tests completed in accordance with test method 7E, Section 8.2.6, must be completed prior to stratification testing, and data must be available for review on site.
- Stratification testing in accordance with test method 7E, Section 8.1.2, must be completed prior to each testing event, and data must be available for review on site.
- All sampling points as dictated by the results of the stratification test are required to be sampled. The sampling time at each point is required to be two times the response time. (Please note that this may cause compliance test runs to last for more than 60 minutes, depending on the response times and the number of points that must be sampled.)

Relative accuracy test audits (“RATA”)

- Relative accuracy determinations are required for each unit of the standard.
- Flow and molecular weight determinations, where required to convert data to units of the standard, are required for each RATA run.
- Moisture determinations are required for each RATA run. Ohio EPA may approve the use of one moisture determination for two RATA runs, depending on the type of source/process, but prior approval is required.
- The use of multi-hole sample probes will not be allowed.

REPORTING REQUIREMENTS:

In addition to the above-mentioned conditions, please note that Ohio EPA must receive test results in a report format consistent with the USEPA Emission Measurement Center Guidance Documents 042 and 043 (GD-042 and GD-043) within 30 days of the test event unless additional time is allowed pursuant to permit conditions or rule requirements that have not been incorporated into the permit. Acceptable test reports must contain the following:

All test reports

- Testing data reported in units of the applicable standard(s).
- Names and contact information for all members of the test team.
- Facility representative name and contact information.
- Emission unit identification(s), including Ohio EPA assigned emissions unit I.D.
- Copies of all field data sheets and measurements.
- Copies of the completed “record of custody” for all samples removed from the testing site - if applicable.
- Full outside laboratory reports with supporting documentation (please call if greater than 25 pages long) - if applicable.
- Copies of all relevant emissions unit process/operational data.
- All formulas used in calculating emission rates if different than specified in the applicable reference methods.
- An explanation of all disruptions encountered during the test period, (i.e., Meter box changes, process shutdowns, broken glassware, etc.)
- All applicable pre-survey work should be included in the final test report.
- Production records and parametric monitoring data recorded during testing must be included in the final report.

Methods 1-4

- Copies of the calibrations performed on all Pitots, meter boxes, thermocouples, barometers, balances, and nozzles used during testing and analysis.
- Copies of the certificates verifying the accuracy of the equipment utilized to calibrate the meter boxes and thermocouples utilized during testing.

Method 5

- Copies of the gravimetric analysis performed on the particulate matter samples complete with laboratory conditions (ambient temperature, barometric pressure, humidity, and time of measurement).

Method 7E

- Copies of the on-site converter check performed per EPA Method 7E, Section 8.2.4.

Method 25/25A

- Test results must be reported in terms of actual VOC, and not VOC as carbon or propane, unless specified by the permit.

All continuous emission monitoring system ("CEMS") Methods

- Copies of all gas certification sheets for every calibration gas utilized.
- Response times for every analyzer in the configuration utilized in the field (EPA Method 7E, Section 8.2.6).

All RATA reports must also include:

- The make, model and serial number of each analyzer that is part of the facility CEMS being tested.
- 7-day drift check data for all CEMS that are undergoing initial certification.
- Linearity data, where required, for all CEMS that are undergoing initial certification.
- Relative accuracy determinations must be reported in each required units of the standard(s) for which the CEMS are being used to demonstrate compliance.
- Facility process data indicating that the facility operated at 50 percent or more of the normal load (EPA Performance Specification 2, Section 8.4.1).

Failure to follow the above guidance may result in Ohio EPA rejecting all or part of the associated test or testing results.

INTENT TO TEST NOTIFICATION (One Emissions Unit Per Sheet)

| | |
|-----------------|-------|
| Agency use only | |
| Date Received | _____ |
| Assigned | _____ |
| | |

Facility Premise No. _____
 Emissions Unit PTI No. _____
 SCC Number _____

Proposed Test Date _____
 Proposed Start Time _____

A. Facility Contact Information:

Name _____
 Address _____
 Contact Person _____
 Telephone (O) _____ (Cell) _____
 E-mail _____

Testing Firm Information:

Name _____
 Address _____
 Contact Person _____
 Telephone (O) _____ (Cell) _____
 E-mail _____

B. Test Location Information:

Name _____
 Contact Person _____

Address _____
 Telephone (O) _____ (Cell) _____

C. Test Plan and Emissions Unit Information Table: List the applicable information under each respective column heading.

| Emission Unit # / Description | Control Equipment | Monitoring Equipment | Pollutant(s) to be Tested | EPA Test Method(s) | Number of Sampling Points | Total Time for Sample Run | Number of Sampling Runs |
|-------------------------------|-------------------|----------------------|---------------------------|--------------------|---------------------------|---------------------------|-------------------------|
| | | | | | | | |
| | | | | | | | |

Are any modifications, or alternatives as spelled out within the test methods, being proposed? Yes No If "no", then no modifications or alternatives, however minor, will be accepted. If yes, list each test method and section being modified, and attach a detailed modification description and justification: _____

Source is testing to comply with (check all that apply): State PTI State PTO Title V NSPS MACT BIF Title IV Other (explain) _____

D. What is the maximum rated capacity or throughput of the emissions unit given in its permit-to-install or permit-to-operate? _____

Has the facility scheduled production or throughput so that the emissions unit can be operated at the maximum capacity given in its permit-to-install or permit-to-operate during the test? Yes No If no, attach explanation.

Specify how the operating rate will be demonstrated during testing: _____

Sampling Location(s): Inlet Outlet Simultaneous Will Cyclonic flow check(s) be conducted? Yes No

Fuel Sampling: Coal - Proximate Ultimate Other If other, specify: _____

Emission rate to be calculated using: F-Factor Ultimate Coal Analysis Other If other, specify: _____

Has any maintenance or parts replacement been performed on the emissions unit or the control equipment within the last year? Yes No

If yes, briefly describe: _____

(Note: Some maintenance, such as installing new filter bags in a baghouse, or replacing the activated carbon in an adsorber, may disqualify the emissions unit from a performance test until a sufficient amount of time has elapsed to ensure a test which will be representative of normal operations.)

E. Sample Train Calibration: All affected measuring and monitoring equipment should be calibrated within 60 days of the scheduled testing.

THE FOLLOWING ADDITIONAL INFORMATION SHALL BE SUBMITTED AS ATTACHMENTS:

F. Sample Train Information:

- A schematic diagram of each sampling train.
- The type or types of capture media to be used to collect each gas stream pollutant. (Include filter specification sheets)
- Sample probe type, (e.g., glass, teflon, stainless steel, etc.)
- Probe cleaning method and solvent to be used, if applicable.

G. Laboratory Analysis:

- A description of the laboratory analysis methods to be used to determine the concentration of each pollutant.

H. Description of Operations:

- A description of any operation, process, or activity that could vent exhaust gases to the stack being tested. This shall include the description and feed rate of all materials capable of producing pollutant emissions used in each separate operation. Maximum process weight rate, or coating rate, and parameters such as line speed, VOC content etc. should be specifically documented with calculations to confirm worst case scenario emissions.

Note 1: All compliance demonstration testing shall be performed at maximum rated capacity as specified by the equipment manufacturer, or at the maximum rate actually used in the emissions unit operation, whichever is greater, or at any other rate as agreed upon with Ohio EPA.

Note 2: If the emissions unit is not operated at maximum capacity, or as close as possible thereto, the emissions unit might be derated to the production capacity achieved during testing.

I. Stack and Vent Description:

- A dimensional sketch or sketches showing the plan and elevation view of the entire ducting and stack arrangement. The sketch should include the relative position of all processes or operations venting to the stack or vent to be tested. It should also include the position of the ports relative to the nearest upstream and downstream gas flow disturbance or duct dimensional change. The sketches should include the relative position, type, and manufacturer's claimed efficiency of all gas cleaning equipment.
- A cross sectional dimensional sketch of the stack or duct at the sampling ports, showing the position of sampling points. In case of a rectangular duct, show division of duct into equal areas.
- For fugitive emissions testing, a sketch illustrating the specific emissions points to be observed must be included.

J. Safety:

- Describe all possible safety hazards including such items as the presence of toxic fumes, high noise levels, areas where eye protection is required, etc. Note: Conditions considered unsafe at the time of the test will cause postponement.