



Version 09.12.12

New Mexico Environment Department
Air Quality Bureau
Compliance and Enforcement Section



**PERIODIC MONITORING
STANDARD OPERATING PROCEDURE**

A. Periodic Monitoring Requirements

- (1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer.
- (2) Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until the analyzer is replaced.
- (3) Unless otherwise indicated by permit conditions or regulatory requirements, the default time period for each test run shall be **at least** 20 minutes. Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.

In addition to the requirements above, for permits requiring determination of catalyst reduction efficiency, one 20 minute test run shall be conducted upstream of the catalyst. Catalyst reduction efficiency shall be calculated as follows:

$$[(\text{Pre conc.} - \text{Post conc.}) / \text{Pre. Conc.}] \times 100$$

Pre conc.: Pollutant concentration upstream of the catalyst

Post conc.: Arithmetic mean of pollutant concentration from the three runs downstream of the catalyst

- (4) For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.
- (5) During emissions tests, pollutant concentration, O₂ concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.
- (6) Pollutant emission rate may be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf for gases) and fuel heating value (Btu/scf for gases) obtained during the test.

B. Test Procedures:

- (1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and allow a representative of the Department to be present at the test. Email notifications to Stacktest.AQB@state.nm.us. We do not accept hard copy or fax submittals.
- (2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.
- (5) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.
- (6) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed.
- (7) Unless otherwise specified by permit conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.