

TITLE 9 - ENVIRONMENT

AGENCY 5 - STATE AIR POLLUTION CONTROL BOARD

CHAPTER 50 - NEW AND MODIFIED STATIONARY SOURCES

SIP Effective Date: May 14, 2004 (as corrected June 18, 2004), unless otherwise indicated

Part I Special Provisions

9 VAC 5-50-10. Applicability.

A. The provisions of this chapter, unless specified otherwise, shall apply to new and modified sources.

B. The provisions of this chapter shall apply to sources specified below except as provided in 9 VAC 5-40-10 B:

1. Any stationary source (or portion of it), the construction, modification or relocation of which commenced on or after March 17, 1972.

2. Any stationary source (or portion of it), the reconstruction of which commenced on or after December 10, 1976.

C. If a facility becomes subject to any requirement in the Regulations for the Control and Abatement of Air Pollution because it exceeds an exemption level, the facility shall continue to be subject to all applicable requirements even if future conditions cause the facility to fall below the exemption level.

D. The provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), unless specified otherwise, shall apply to new and modified sources to the extent that those provisions thereof are more restrictive than the provisions of this chapter, 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.), or any permit issued pursuant to 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.).

E. [Not In SIP]

F. Any owner subject to the provisions of this chapter may provide any report, notification or other document by electronic media if acceptable to both the owner and board. This subsection shall not apply to documents requiring signatures or certification under 9 VAC 5-20-230.

9 VAC 5-50-20. Compliance. [Revised; SIP effective date is April 26, 2010]

A. Sixty days after achieving the maximum production rate, but not later than 180 days after initial startup, no owner or other person shall operate any new or modified source in violation of any standard of performance prescribed under this chapter.

1. Compliance with standards in this chapter, other than opacity standards, shall be determined by performance tests established by 9 VAC 5-50-30, unless specified otherwise in the applicable standard.

2. Compliance with federal requirements in this chapter may be determined by alternative or equivalent methods only if approved by the administrator. For purposes of this subsection, federal requirements consist of the following:

a. New source performance standards established pursuant to 111 of the federal Clean Air Act.

b. All terms and conditions in a federal operating permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable.

c. Limitations and conditions that are part of an implementation plan .

d. Limitations and conditions that are part of a 111(d) or 111(d)/129 plan.

e. Limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by EPA in accordance with 40 CFR Part 51.

f. Limitations and conditions that are part of an operating permit issued pursuant to a program approved by EPA into an implementation plan as meeting EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability.

3. Compliance with opacity standards in this chapter may be determined by one or more of the following means:

a. Conducting observations in accordance with Reference Method 9 or any alternative method approved by EPA. If specified in the permit granted pursuant to 9VAC5 Chapter 80 (9VACS-80). For purposes of determining initial compliance, the minimum total time of observations shall be three hours (30 six-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards.

b. Evaluation of data resulting from use of continuous monitoring by transmissometer, provided the instrument used meets Performance Specification 1 in Appendix B of 40 CFR Part 60 and has been properly maintained and that the resulting data have not been altered in any way.

c. Use of any other method approved by EPA.

4. The opacity standards prescribed under this chapter shall apply at all times except during periods of startup, shutdown, malfunction and as otherwise provided in the applicable standard.

5. Variation from a specified standard may be granted by the board for a definite period for testing and adjustment.

B. No owner of a new or modified source subject to the provisions of this chapter shall fail to conduct performance tests as required under this chapter.

C. No owner of a new or modified source subject to the provisions of this chapter shall fail to install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions or process parameters or both as required under this chapter.

D. No owner of a new or modified source subject to the provisions of this chapter shall fail to provide notifications and reports, revise reports, maintain records or report performance test or monitoring results as required under this chapter.

E. At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

F. At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.

G. The following provisions apply with respect to compliance with opacity standards.

1. For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test unless one of the following conditions apply.

a. If no performance test is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility.

b. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test, the owner shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the board of the rescheduled date. In these cases, the 30-day prior notification to the board required by 9 VAC 5-50-50 A 6 shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9.

Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner of an affected facility shall make available, upon request by the board, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. The results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided the source meets the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in Appendix B of 40 CFR Part 60 and has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

2. Except as provided in subdivision 3 of this subsection, the owner of an affected facility to which an opacity standard in this chapter applies shall conduct opacity observations in accordance with subdivision A 3 of this section, shall record the opacity of emissions, and shall report to the board the opacity results along with the results of the initial performance test. The inability of an owner to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

3. The owner of an affected facility to which an opacity standard in this chapter applies may request the board to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner of the affected facility shall report the opacity results. Any request to the board to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in 9 VAC 5-50-50 A 6. If, for some reason, the board cannot determine and

record the opacity of emissions from the affected facility during the performance test, then the provisions of subdivision 1 of this subsection shall apply.

4. An owner of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test and shall furnish the board a written report of the monitoring results along with the Reference Method 9 and initial performance test results.

H. The following provisions apply with respect to stack heights.

1. The degree of emission limitation required of any source owner for control of any air pollutant shall not be affected in any manner by:

- a. So much of the stack height of any source as exceeds good engineering practice, or
- b. Any other dispersion technique.

2. The provisions of subdivision 1 of this subsection shall not apply to:

a. Stack heights in existence, or dispersion techniques implemented on or before December 31, 1970, except where pollutants are being emitted from such stacks or using such dispersion techniques by sources, as defined in 111(a)(3) of the federal Clean Air Act, which were constructed, or reconstructed, or for which major modifications, as defined in Article 8 (9 VAC 5-80-1700 et seq.) and Article 9 (9 VAC 5-80-2000 et seq.) of Part II of 9 VAC 5 Chapter 80 , were carried out after December 31, 1970; or

b. Coal-fired steam electric generating units subject to the provisions of 118 of the federal Clean Air Act, which commenced operation before July 1, 1957, and whose stacks were constructed under a construction contract awarded before February 8, 1974.

3. Prior to the adoption of a new or revised emission limitation that is based on a good engineering practice stack height that exceeds the height allowed by subdivision 1 or 2 of the GEP definition, the board shall notify the public of the availability of the demonstration study and shall provide opportunity for public hearing on it.

4. For purposes of this subsection, such height shall not exceed the height allowed by subdivision 1 or 2 of the GEP definition unless the owner demonstrates to the satisfaction of the board, after 30 days notice to the public and opportunity for public hearing, that a greater height is necessary as provided under subdivision 3 of the GEP definition.

5. In no event may the board prohibit any increase in any stack height or restrict in any manner the maximum stack height of any source.

6. Compliance with standards of performance in this chapter shall not be affected in any manner by the stack height of any source or any other dispersion technique.

I. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this chapter, nothing in this chapter shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

9 VAC 5-50-30. Performance testing.

A. Performance tests for new or modified sources shall be conducted and reported and data shall be reduced as set forth in this chapter and the test methods and procedures contained in each applicable subpart listed in 9 VAC 5-50-410 unless the board

(i) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

(ii) approves the use of an equivalent method;

(iii) approves the use of an alternative method the results of which the board has determined to be adequate for indicating whether a specific source is in compliance;

(iv) waives the requirement for performance tests because the owner of a source has demonstrated by other means to the board's satisfaction that the affected facility is in compliance with the standard; or

(v) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Any new or modified source, for which no standards of performance are set forth in Article 5 (9 VAC 5-50-400 et seq.) of this part, shall be performance tested by appropriate reference methods unless the board

(i) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

(ii) approves the use of an equivalent method;

(iii) approves the use of an alternative method the results of which the board has determined to be adequate for indicating whether a specific source is in compliance;

(iv) waives the requirement for performance tests because the owner of a source has demonstrated by other means to the board's satisfaction that the affected facility is in compliance with the standard; or

(v) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. In cases where no appropriate reference method exists for a new or modified source subject to a standard of performance for volatile organic compounds, the test methods in 9 VAC 5-20-121 may be considered appropriate.

B. Performance testing for new or modified sources shall be subject to testing guidelines approved by the board. Procedures may be adjusted or changed by the board to suit specific sampling conditions or needs based upon good practice, judgment and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established standards. Tests shall be performed under the direction of persons whose qualifications are acceptable to the board.

C.**[SIP effective date: 6/20/2000]** Performance tests for new or modified sources shall be conducted under conditions which the board shall specify to the owner based on representative performance of the source. The owner shall make available to the board such records as may be necessary to determine the conditions of the performance tests. Operation during periods of startup, shutdown and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

D. An owner may request that the board determine the opacity of emissions from a new or modified source during the performance tests required by this section.

E. Unless specified otherwise in the applicable standard, each performance test for a new or modified source shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or if conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other circumstances beyond the owner's control, compliance may, upon the approval of the board, be determined using the arithmetic mean of the results of the two other runs.

F. The board may test emissions of air pollutants from any new or modified source. Upon request of the board the owner shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such source. This includes

(i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and

(ii) providing a stack or duct with acceptable flow characteristics during performance tests, as demonstrated by applicable test methods and procedures.

2. Safe sampling platforms.
3. Safe access to sampling platforms.
4. Utilities for sampling and testing equipment.

G. Upon request of the board, the owner of any new or modified source subject to the provisions of this chapter shall conduct performance tests in accordance with procedures approved by the board.

9 VAC 5-50-40. Monitoring.

A. Unless otherwise approved by the board or specified in applicable subparts listed in 9 VAC 5-50-410, the requirements of this section shall apply to all continuous monitoring systems required for affected facilities in accordance with applicable subparts listed in 9 VAC 5-50-410. However, nothing in this chapter shall exempt any owner from complying with subsection F of this section.

B. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device.

C. During any performance tests required under 9 VAC 5-50-30 or within 30 days thereafter and at such other times as may be requested by the board, the owner of any affected facility shall conduct continuous monitoring system performance evaluations and furnish the board within 60 days of them two or, upon request, more copies of a written report of the results of such tests. These continuous monitoring system performance evaluations shall be conducted in accordance with the requirements and procedures contained in the applicable performance specification of Appendix B of 40 CFR Part 60.

D. Unless otherwise approved by the board, all continuous monitoring systems required by subsection A of this section shall be installed, calibrated, maintained and operated in accordance with applicable requirements in this section, 40 CFR 60.13 and the applicable subpart listed in 9 VAC 5-50-410.

E. After receipt and consideration of written application, the board may approve alternatives to any monitoring procedures or requirements of this chapter including, but not limited to, the following:

1. Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this chapter would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases.
2. Alternative monitoring requirements when the affected facility is infrequently operated.
3. Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.
4. Alternative locations for installing continuous monitoring systems or monitoring devices when the owner can demonstrate that installation at alternate locations will enable accurate and representative measurements.
5. Alternative methods of converting pollutant concentration measurements to units of the applicable standards.
6. Alternative procedures for performing daily checks or zero and span drift that do not involve use of span gases or test cells.
7. Alternatives to the ASTM test methods or sampling procedures specified by any subpart listed in 9 VAC 5-50-410.
8. Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1 of Appendix B of 40 CFR Part 60, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1 of Appendix B of 40 CFR Part 60. The board may require that demonstration be performed for each affected facility.
9. Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.
10. Alternative monitoring systems that meet the requirements of 40 CFR Part 75 (i) if a source is subject to 40 CFR Part 75 or (ii) if the board determines that the requirements of 40 CFR Part 75 are more appropriate for the source than the pertinent provisions of this chapter.

F. Upon request of the board, the owner of a new or modified source subject to the provisions of this chapter shall install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions or process parameters or both in accordance with methods and procedures acceptable to the board.

9 VAC 5-50-50. Notification, records and reporting.

A. Any owner of a new or modified source subject to the provisions of this chapter shall provide written notifications to the board of the following:

1. The date of commencement of construction, reconstruction or modification of a new or modified source postmarked no later than 30 days after such date.
2. The anticipated date of initial startup of a new or modified source postmarked not more than 60 days nor less than 30 days prior to such date.
3. The actual date of initial startup of a new or modified source postmarked within 15 days after such date.
4. The date of any performance test required by 9 VAC 5 Chapter 80 (9 VAC 5-80) and any other performance test the owner wishes the board to consider in determining compliance with a standard. Notification shall be postmarked not less than 30 days prior to such date.
5. The date upon which demonstration of the continuous monitoring system performance begins in accordance with 9 VAC 5-50-40 C. Notification shall be postmarked not less than 30 days prior to such date.
6. The anticipated date for conducting the opacity observations required by 9 VAC 5-50-20 G 1. The notification shall also include, if appropriate, a request for the board to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

B. Any owner of a new or modified source subject to the provisions of 9 VAC 5-50-40 A shall maintain records of the occurrence and duration of any startup, shutdown or malfunction in the operation of such source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

C. Each owner required to install a continuous monitoring system (CMS) or monitoring device shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form , or both to the board semiannually, except when

(i) more frequent reporting is specifically required by an applicable subpart listed in 9 VAC 5-50-410 or the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted or

(ii) the board, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. The summary report and form shall meet the requirements of 40 CFR 60.7(d). The frequency of reporting requirements may be

reduced as provided in 40 CFR 60.7(e). All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions. The process operating time during the reporting period.

2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

D. Any owner of a new or modified source subject to the provisions of this chapter shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this chapter recorded in a permanent form suitable for inspection. The file shall be retained for at least two years (unless a longer period is specified in the applicable standard) following the date of such measurements, maintenance, reports and records.

E. Any data or information required by the Regulations for the Control and Abatement of Air Pollution, any permit or order of the board, or which the owner wishes the board to consider, to determine compliance with an emission standard shall be recorded or maintained in a time frame consistent with the averaging period of the standard.

F. The owner of a stationary source shall keep records as necessary to determine its emissions. Any owner claiming that a facility is exempt from the provisions of the Regulations for the Control and Abatement of Air Pollution shall keep records to demonstrate its continued exempt status.

G. The owner of a new or modified source subject to any volatile organic compound emission standard for a coating operation or printing process shall maintain records in accordance with the applicable procedure in 9 VAC 5-20-121.

H. Upon request of the board, the owner of a new or modified source subject to the provisions of this chapter shall provide notifications and reports, maintain records or report performance test or monitoring results in a manner and form and using procedures acceptable to the board.