incorporated by reference in ch. NR 484, to determine compliance with a nonfugitive particulate emission limitation.

- (2) Sulfur dioxide emissions. The owner or operator of a source shall use one or more of the following methods to determine compliance with a sulfur dioxide emission limitation:
- (a) Method 6, 6A, 6B, 6C or 8 in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, or
- (b) Install, calibrate, maintain and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, Appendix B, incorporated by reference in ch. NR 484, and follow quality control and quality assurance procedures for the monitor which have been submitted by the owner or operator of the source and approved by the department, or
- (c) Perform periodic fuel sampling and analysis of fossil and nonfossil fuels using the methods and procedures specified in s. NR 439.08.
- (3) Organic compound emissions. The owner or operator of a source shall use the test methods and procedures listed in this subsection to determine compliance with an organic compound emission limitation. If a test method inadvertently measures compounds which are listed in s. NR 400.02 (100) as having negligible photochemical reactivity, the owner or operator may exclude these compounds when determining compliance with a VOC emission limit. Unless a source achieves compliance through an averaging method specifically authorized by the department, organic compound emission limitations in chs. 419 to 424 shall be achieved on an instantaneous basis.
- (a) Method 18, 25, 25A or 25B in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, shall be used to determine organic compound emission concentrations or emission rates.
- (b) Method 24 or 24A in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, shall be used to determine the organic solvent content, the volume of solids, the weight of solids, the water content and the density of surface coatings and inks.
- (c) Method 21 in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, shall be used to detect organic compound emission leaks.
- (d) Method 27 in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, shall be used to verify the vapor tightness of gasoline delivery tanks.
- (e) The equations in s. NR 425.05 (1) (b) 2. or (2) (b) 2. shall be used to determine compliance with an internal offset.
- (f) Methods approved by the department shall be used to determine the transfer efficiency of surface coating equipment.
- (g) Method 25A in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, shall be used to determine compliance with the aerosol can filling VOC emission limit in s. NR 424.04. If a flame ionization detector is used to test compliance with s. NR 424.04, test equipment calibration shall be conducted with propane. During the testing procedure, the flame ionization detector shall continuously measure

NR 439

VOC emissions for a minimum of one hour per aerosol can filling line with the control device not in operation and for a minimum of one hour with the control device in full operation. Production data taken concurrently with the testing procedure shall be used to calculate the VOC emission rates for the tested aerosol can filling line when the control device is not in operation and when the control device is in full operation.

- (h) Compounds identified in s. NR 400.02 (100) shall be treated as water to determine compliance with emission limitations which refer to water.
- (4) CARBON MONOXIDE EMISSIONS. The owner or operator of a source shall use one of the following methods to determine compliance with a carbon monoxide emission limitation:
- (a) Method 10 in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, or
- (b) Install, calibrate, maintain and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, Appendix B, incorporated by reference in ch. NR 484, and follow quality control and quality assurance procedures for the monitor which have been submitted by the owner or operator of the source and approved by the department.
- (5) Lead emissions. The owner or operator of a source shall use Method 12 in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, to determine compliance with a lead emission limitation.
- (6) NITROGEN COMPOUND EMISSIONS. The owner or operator of a source shall use one of the following methods to determine compliance with a nitrogen compound emission limitation:
- (a) Method 7, 7A, 7B, 7C, 7D or 7E in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, or
- (b) Install, calibrate, maintain and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, Appendix B, incorporated by reference in ch. NR 484, and follow quality control and quality assurance procedures for the monitor which have been submitted by the owner or operator of the source and approved by the department.
- (7) TOTAL REDUCED SULFUR EMISSIONS. The owner or operator of a source shall use one of the following methods to determine compliance with a total reduced sulfur emission limitation:
- (a) Method 16 or 16A in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, or
- (b) Install, calibrate, maintain and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, Appendix B, incorporated by reference in ch. NR 484, and follow quality control and quality assurance procedures for the monitor which have been submitted by the owner or operator of the source and approved by the department.
- (8) EMISSIONS OF OTHER AIR CONTAMINANTS. The owner or operator of a source shall use methods and procedures approved, in writing, by the Register, May, 1992, No. 437

department to determine compliance with an emission limitation for an air contaminant not listed in subs. (1) to (7).

- (9) METHODS AND PROCEDURES FOR VISIBLE EMISSIONS. (a) The owner or operator of a source shall use one of the following methods to determine compliance with a visible emission limitation:
- 1. Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, or
- 2. Install, calibrate, maintain and operate a continuous emission monitor that meets the performance specifications in 40 CFR part 60, Appendix B, incorporated by reference in ch. NR 484.
- (b) The owner or operator of a source shall use Method 22 in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, to determine compliance with a no visible emission requirement.
- History: Cr. Register, September, 1987, No. 381, eff. 10-1-87; cr. (3) (g), Register, April, 1988, No. 388, eff. 5-1-88; am. (intro.) (3) and (6) (a), cr. (3) (h), Register, February, 1990, No. 410, eff. 3-1-90; am. (intro.) and (2) (c), Register, May, 1992, No. 437, eff. 6-1-92.
- NR 439.07 Methods and procedures for periodic compliance emission testing. The owner or operator of a source required to conduct emission testing under s. NR 439.075 shall comply with all applicable methods and procedures listed in this section.
- (1) General. All emission tests conducted for the purpose of determining compliance with an emission limitation under chs. NR 400 to 499 shall be performed according to the test methods established in 40 CFR part 60, Appendix A, incorporated by reference in ch. NR 484, or according to other test methods approved in writing by the department. The owner, operator or contractor responsible for emission testing shall follow the procedures in this section. Unless the department requires or approves the performance of a test at less than capacity, all compliance emission tests shall be performed with the equipment operating at capacity or as close to capacity as practical.
- (2) EMISSION TEST NOTIFICATION AND TEST PLAN SUBMITTAL. The department shall be notified in writing at least 20 business days in advance of a compliance emission test to provide the department an opportunity to have a representative present to witness the testing procedures. The notice shall provide a test plan which includes, but need not be limited to, the following:
- (a) A description of the sampling equipment and the test methods and procedures to be used.
 - (b) A description of the process to be tested.
- (c) A description of the process or operation variables which affect the air contaminant source's emissions.
 - (d) The date and starting time of the test.
- (e) A description of the number and location of the sampling ports and sampling points including a sketch showing the distance of the sampling ports from the nearest upstream and downstream flow disturbances and the stack dimensions.

NR 439

- (f) A statement indicating the production rate and the operating conditions at which the test will be conducted.
- (3) Test plan evaluation. In evaluating the test plan, the department shall respond to the source owner or operator within 10 business days of receipt of the plan and may require the following:
- (a) A pre-test conference which includes the owner or operator of the source, the tester and the department to discuss any deficiencies in the plan or settle any test procedure questions the department, the tester or the source owner or operator might have.
- (b) Any reasonable stack or duct modification or any change to the sampling method that is deemed necessary by the department to obtain a representative sample.
- (c) Additional tests for the same pollutants to be performed at the same or different operating conditions.
- (d) A rescheduling of the test to accommodate witnessing or source production schedules.
- (4) NOTIFICATION OF TEST PLAN REVISION. The source owner or operator shall notify the department of any modifications to the test plan at least 5 business days prior to the test.
- (5) Testing facilities. The department may require the owner or operator of a source to provide the following emission testing facilities:
 - (a) The installation of sampling ports and safe sampling platforms.
 - (b) A safe work area for the test crew or any witnessing personnel.
 - (c) Safe access to the work area or sampling platform.
 - (d) Utilities for the sampling equipment.
 - (e) Instrumentation to monitor and record emissions data.
- (6) WITNESSING REQUIREMENTS. The department may require that a department representative be present at any compliance emission test. The department representative has the following authority:
- (a) The department representative shall, during the test, supply the tester with the appropriate audit samples required in the reference method for quality assurance purposes.
- (b) The department representative may require the tester to provide the department a copy of all test data and equipment calibration data prepared or collected for the test.
- (c) The department representative may take any or all of the test samples collected during the test for analysis by the department.
- (d) The department witness may require the source owner or operator and tester to correct any deficiency in the performance of the test provided that the department witness notifies the source owner or operator and tester of the deficiency as soon as it is discovered. The failure of a source owner or operator and tester to correct any deficiency may result in the department refusing to accept the testing results.

Register, May, 1992, No. 437