

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) Perform compliance emission testing following 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 if the amount of these compounds is accurately quantified and the exclusion is approved by the department. As a precondition to excluding these compounds as VOC or at any subsequent time, the department may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of the department, the amount of negligibly reactive compounds in the source's emissions. 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 except as provided in par. (i) 2 or 3.

(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 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.

(i) The owner or operator of a gasoline dispensing facility shall use the methods in this paragraph to determine compliance of motor vehicle fueling vapor recovery systems required under s. NR 420.045 (7):

1. San Diego Air Pollution Control District Test Procedure TP-91-2, incorporated by reference in ch. NR 484, shall be used for dynamic back-pressure and liquid blockage tests.

2. San Diego Air Pollution Control District Test Procedure TP-91-1, incorporated by reference in ch. NR 484, shall be used for leak tests.

3. The department may approve the use of alternative test methods for a vapor recovery system only if the manufacturer, installer or operator of the vapor recovery system demonstrates all of the following:

a. The test method in subd. 1 or 2 is not applicable to the vapor recovery system;

b. The proposed test method will provide test results which are similar to those provided by the test method in subd. 1 or 2 in terms of accuracy and validity; and

c. The proposed test method has been accepted by another air pollution control agency within the United States.

(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 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; am. (3) (c), cr. (3) (i), Register, January, 1993, No. 445, eff. 2-1-93; am. (2) (a) and (3) (intro.), Register, May, 1993, No. 449, eff. 6-1-93.

**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

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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.

(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.

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(2) AFFECTED EMISSION POINTS AND AIR CONTAMINANTS REQUIRING TESTING. (a) Except as provided in sub. (4), the owner or operator of a source identified in this paragraph, with an emission point that has allowable emissions of particulate matter, sulfur dioxide or organic compounds of 100 tons or more per year or allowable emissions of total reduced sulfur of 25 tons or more per year, shall perform compliance emission testing according to the testing schedules in sub. (3).

1. Compliance emission testing for particulate matter is required for an emission point subject to a particulate emission limitation under ch. NR 405 or in s. NR 415.04 (2) (b) 2 or (c) 1, 415.05, 415.06, 415.07 or 415.08 (3) or (6).

2. Compliance emission testing for sulfur dioxide is required for an emission point subject to a sulfur dioxide emission limitation under ch. NR 405 or in s. NR 417.07 (2), (3), (4) or (5), 418.025, 418.03 or 418.04 or to a more restrictive emission limit as described in s. NR 417.07 (1) (b).

3. Compliance emission testing for total reduced sulfur is required for an emission point subject to an emission limitation in s. NR 417.06.

4. Compliance emission testing for organic compounds is required for an emission point subject to an emission limitation in s. NR 421.03, 421.04, 422.05 to 422.08, 422.09 to 422.155, 423.05, 424.03 or 424.04 which uses a control device to achieve compliance with the applicable requirements. This test shall include a determination of the overall control efficiency of the control device on the affected emission point.

(b) The owner or operator of a source, subject to the requirements of ch. NR 427 or chs. NR 445 to 449, shall perform compliance emission testing for lead, mercury, beryllium or vinyl chloride according to the testing schedules in sub. (3).

1. Compliance emission testing for mercury is required for an emission point identified in s. NR 446.04 (1), (2) or (3).

2. Compliance emission testing for beryllium is required for an emission point identified in s. NR 448.03 (1).

3. Compliance emission testing for vinyl chloride is required for an emission point identified in s. NR 449.04, 449.05 or 449.06 (1), (2), (3) or (4) and for any control system to which reactor emissions are required to be ducted in s. NR 449.06 (1) (b) or (5) (a) or (b) or to which fugitive emissions are required to be ducted in s. NR 449.07 (2) (a), (b), (c), (e), (f) or (i).

4. Compliance emission testing for lead is required for an emission point with allowable emissions of one ton per year or more that is subject to an emission limitation in s. NR 427.03.

(c) Except as provided in sub. (4), the owner or operator of a source identified in this paragraph which is subject to the requirements of ch. NR 440 shall perform compliance emission testing for the following air contaminants according to the testing schedules in sub. (3).

1. Compliance emission testing for particulate matter is required for the following:

a. Fossil fuel fired steam generators subject to s. NR 440.19 or 440.20.

- b. Incinerators subject to s. NR 440.21.
- c. Kilns at Portland cement plants subject to s. NR 440.22.
- d. Dryers at asphalt concrete plants subject to s. NR 440.25 with a rated capacity of 250 tons per hour or more at 5% moisture removal.
- e. Fluid catalytic cracking unit catalyst regenerators and fuel gas combustion devices at petroleum refineries subject to s. NR 440.26.
- f. Pot, cupola and reverberatory furnaces at secondary lead smelters subject to s. NR 440.29.
- g. Cupola, electric arc and reverberatory furnaces at secondary brass and bronze ingot production plants subject to s. NR 440.30.
- h. Basic oxygen process furnaces at iron and steel plants subject to s. NR 440.31.
- i. Incinerators at sewage treatment plants subject to s. NR 440.32.
- j. Dryers at primary copper smelters subject to s. NR 440.33.
- k. Sintering machines at primary zinc smelters subject to s. NR 440.34.
- l. Blast furnaces, dross reverberatory furnaces and sintering machines at primary lead smelters subject to s. NR 440.35.
- m. Thermal dryers and pneumatic coal cleaning equipment at coal preparation plants subject to s. NR 440.42.
- n. Electric arc furnaces and dust handling equipment at ferroalloy production facilities subject to s. NR 440.43.
- o. Electric arc furnaces at steel plants subject to s. NR 440.44.
- p. Electric arc furnaces and argon-oxygen decarburization vessels at steel plants subject to s. NR 440.445.
- q. Recovery furnaces, smelt dissolving tanks and lime kilns at kraft pulp mills subject to s. NR 440.45.
- r. Melting furnaces at glass manufacturing plants subject to s. NR 440.46.
- s. Kilns at lime manufacturing plants subject to s. NR 440.51.
- t. Control devices at metallic mineral processing plants with sources subject to the requirements of s. NR 440.525.
- u. Dryers, calciners and grinders at phosphate rock plants subject to s. NR 440.54.
- v. Ammonium sulfate dryers at ammonium sulfate manufacturing plants subject to s. NR 440.55.
- w. Saturators and blowing stills at asphalt processing and asphalt roofing manufacturing plants subject to s. NR 440.59.
- x. Rotary spun wool fiberglass insulation manufacturing lines at wool fiberglass insulation plants subject to s. NR 440.69.



2. Compliance emission testing for sulfur dioxide is required for fossil fuel fired steam generators subject to s. NR 440.19 or 440.20.

3. Compliance emission testing for volatile organic compounds, including a determination of the overall control efficiency of any control device, is required for the following:

a. Control devices at facilities subject to the surface coating of metal furniture requirements in s. NR 440.48.

b. Control devices at facilities subject to the automobile and light-duty truck surface coating requirements in s. NR 440.53.

c. Control devices at facilities subject to the graphic arts industry requirements in s. NR 440.56.

d. Control devices at facilities subject to the pressure sensitive tape and label surface coating requirements of s. NR 440.565.

e. Control devices at facilities subject to the large appliance surface coating requirements in s. NR 440.57.

f. Control devices at facilities subject to the metal coil surface coating requirements in s. NR 440.58.

g. Control devices at facilities subject to the beverage can surface coating requirements of s. NR 440.63.

h. Control devices at bulk gasoline terminals subject to the requirements in s. NR 440.64.

i. Control devices at facilities subject to the flexible vinyl and urethane coating and printing requirements of s. NR 440.65.

j. Control devices at synthetic organic chemical manufacturing facilities subject to the requirements of s. NR 440.675 or 440.686.

k. Control devices at facilities subject to the magnetic tape coating requirements of s. NR 440.71.

l. Control devices at facilities subject to the polymeric coating of supporting substrate requirements of s. NR 440.74.

4. Compliance emission testing for lead is required for grid casting, paste mixing, 3-process operation, lead oxide, lead reclamation and other lead emitting sources at lead acid battery manufacturing plants subject to s. NR 440.52.

5. Compliance emission testing for nitrogen oxides is required for fossil fuel fired steam generators subject to s. NR 440.19 or 440.20.

6. Compliance emission testing for fluorides is required for the following:

a. Reactors, filters, evaporators and hot wells at wet process phosphoric acid plants subject to s. NR 440.37.

b. Evaporators, hot wells, acid sumps and cooling tanks at super phosphoric acid plants subject to s. NR 440.38.

c. Reactors, granulators, dryers, coolers, screens and mills at diammonium phosphate plants subject to s. NR 440.39.

d. Mixers, curing belts or dens, reactors, granulators, dryers, cookers, screens, mills and facilities which store run-of-pile material at triple superphosphate plants subject to s. NR 440.40.

e. Storage or curing piles, conveyors, elevators, screens and mills at granular triple superphosphate storage facilities subject to s. NR 440.41.

(3) TESTING SCHEDULES. (a) The owner or operator of a direct stationary source which has received a construction, modification or new operation permit under s. 144.391 (1) (b), (2) (b) or (3) (b), Stats., shall perform the compliance emission tests required under sub. (2) (a) during the initial operating period authorized by the permit and shall perform the compliance emission tests required under sub. (2) at least once every 24 months thereafter as long as the permit remains valid. Each biennial test shall be performed within 90 days of the anniversary date of release for permanent operation of the affected source or within 90 days of an alternate date specified by the department.

(b) The owner or operator of a direct stationary source which has received a mandatory operating permit under s. 144.391 (1) (bm), (2) (bm) or (3) (bm), Stats., shall perform the compliance emission tests required under sub. (2) every 24 months as long as the permit remains valid. Each biennial test shall be performed within 90 days of the anniversary date of the issuance of the permit or within 90 days of an alternate date specified by the department.

(c) The owner or operator of a direct stationary source which has received an elective operating permit under s. 144.391 (1) (c), (2) (c) or (3) (c), Stats., shall perform the compliance emission tests required under sub. (2) every 24 months as long as the permit remains valid. Each biennial test shall be performed within 90 days of the anniversary date of the issuance of the permit or within 90 days of an alternate date specified by the department.

(4) EXCEPTIONS TO COMPLIANCE EMISSION TESTING REQUIREMENTS. (a) The following exceptions apply to the testing required under sub. (2) (a) or (c):

1. The department may grant a written waiver of a scheduled test if:

a. The direct stationary source associated with the emission point subject to the testing requirement will be ceasing operation within one year of a scheduled test; or

b. The most recently completed test results from a test conducted according to the methods and procedures specified in s. NR 439.07 for the direct stationary source demonstrate that the emissions of the air contaminant for which compliance emission testing is required under this section are 50% or less of the applicable emission limitation; or

c. The direct stationary source associated with the emission point subject to the testing requirement has not operated more than 360 hours in the previous 12 month period prior to the scheduled test date.

2. No periodic compliance emission test is required under this section for any affected emission point equipped with a continuous emission monitor for the air contaminants requiring testing if the monitor meets the performance specification requirements of s. NR 439.09.

3. No periodic compliance emission test is required under this section for any affected emission point of a fuel burning installation that only fires natural gas, propane or distillate fuel oil or any combination of these fuels.

(b) All requests for waivers under par. (a) shall be submitted in writing for department review and approval at least 60 days prior to the required test date.

History: Cr. Register, September, 1987, No. 381, eff. 10-1-87; am. (1) (b) 1. d., Register, April, 1988, No. 388, eff. 5-1-88; am. (1) (d) 1. d., Register, August, 1989, No. 404, eff. 9-1-89; renum. from NR 439.12 and am. (1) (b) 3. f. and (d) 1. b., Register, February, 1990, No. 410, eff. 3-1-90; renum. (1) (b) 3. a. 16) and 17) to be 17) and 16), am. (1) (b) 3. a. 23) and c. 6), Register, July, 1990, No. 415, eff. 8-1-90; renum. (1) (a) to (d), (2) and (3) to be (1) to (4), NR 439.085 and NR 439.095 and am., Register, May, 1992, No. 437, eff. 6-1-92; renum. (2) (c) 1. t. to w. and 3. d. to f. to be (2) (c) 1. u, v, w. and t., and 3. e., f. and d., cr. (2) (c) 3. j., k. and l., Register, May, 1993, No. 449, eff. 6-1-93.

**NR 439.08 Methods and procedures for periodic fuel sampling and analysis.** The owner or operator of a source required to conduct fuel sampling and analysis under s. NR 439.085 shall use the methods and procedures listed in this section to obtain fuel samples and perform analyses for certain properties and constituents. Alternative methods may be used if approved, in writing, by the department.

(1) **SAMPLING AND ANALYSIS OF COAL.** (a) *Coal sampling.* Coal sampling shall be performed according to ASTM D2234-89, Collection of a Gross Sample of Coal, incorporated by reference in ch. NR 484.

(b) *Preparing coal for analysis.* Preparation of a coal sample for analysis shall be performed according to ASTM D2013-86, Preparing Coal Samples for Analysis, incorporated by reference in ch. NR 484.

(c) *Sulfur content in coal.* The sulfur content of a coal sample shall be determined according to ASTM D3177-89, Total Sulfur in the Analysis Sample of Coal and Coke, or ASTM D4239-85, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, incorporated by reference in ch. NR 484.

(d) *Heat content in coal.* The heat content of a coal sample shall be determined according to ASTM D2015-85, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, incorporated by reference in ch. NR 484.

(e) *Ash content in coal.* The ash content of a coal sample shall be determined according to ASTM D3174-89, Standard Test Method for Ash in the Analysis Sample of Coal and Coke, incorporated by reference in ch. NR 484.

(f) *Moisture content in coal.* The moisture content of a coal sample shall be determined according to ASTM D3173-87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, incorporated by reference in ch. NR 484.

(g) *Ultimate analysis of coal.* The ultimate analysis of a coal sample shall be determined according to ASTM D3176-89, Ultimate Analysis of Coal and Coke, incorporated by reference in ch. NR 484.

(h) *Coal audit samples.* The owner or operator of a source shall be required to participate at least once every 6 months in an interlaboratory coal audit program acceptable to the department. The results of the au-

dit shall be reported to the department in the quarterly report on coal quality required under s. NR 439.085 (2) following receipt of the results from the audit program. The results shall comply with quality control and quality assurance procedures submitted by the owner or operator of the source and approved by the department.

(2) **SAMPLING AND ANALYSIS OF LIQUID FOSSIL FUEL.** (a) *Liquid fossil fuel sampling.* Liquid fossil fuel sampling shall be performed according to ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products or ASTM D4177-82, Standard Method for Automatic Sampling of Petroleum and Petroleum Products, incorporated by reference in ch. NR 484.

(b) *Sulfur content in liquid fossil fuel.* The sulfur content of a liquid fossil fuel sample shall be determined according to ASTM D129-64 (1978), Sulfur in Petroleum Products (General Bomb Method), ASTM D1552-83, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method) or ASTM D4294-83, Sulfur in Petroleum Products by Nondispersive X-ray Fluorescence Spectrometer, incorporated by reference in ch. NR 484.

(c) *Heat content in liquid fossil fuel.* The heat content of a liquid fossil fuel sample shall be determined according to ASTM D240-87, Heat of Combustion of Liquid Hydrocarbon Fuels by a Bomb Calorimeter, incorporated by reference in ch. NR 484.

(3) **SAMPLING AND ANALYSIS OF FUELS OTHER THAN COAL AND LIQUID FOSSIL FUEL.** The owner or operator of a source required by the department to sample and analyze fuel other than coal and liquid fossil fuel shall use methods and procedures approved, in writing, by the department.

History: Renum. from NR 439.07 (2) and am., Register, May, 1992, No. 437, eff. 6-1-92; am. (2) (b), Register, May, 1993, No. 449, eff. 6-1-93.

**NR 439.085 Periodic fuel sampling and analysis requirements.** (1) **GENERAL APPLICABILITY.** Effective April 1, 1989, the requirements of this section apply to all owners or operators of sources described in this section, with the following exceptions:

(a) Sources affected by the RACT sulfur limitations in s. NR 418.04, 418.05, 418.06, 418.07 or 418.08.

(b) Sources with approved RACT variances under s. NR 436.05 affected by the sulfur limitations in s. NR 418.025 or 418.03.

(c) Sources which have installed a sulfur dioxide continuous emission monitor that meets the performance specification requirements of s. NR 439.09.

(2) **REQUIREMENTS FOR COAL BURNING INSTALLATIONS.** (a) The owner or operator of a coal burning installation which has a coal burning rate equal to or greater than 250,000 tons per year shall sample coal and submit reports on coal quality in the following manner:

1. Perform coal sampling, using the procedures in ASTM D2234-89, incorporated by reference in ch. NR 484, which result in data at least as reliable as classification 1-B-1, defined in ASTM D2234-89 as automatic sampling — full stream cut — systematic spacing, and analyze these

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samples for ash content, sulfur content and heat content according to the applicable methods and procedures in s. NR 439.08 (1).

2. Submit quarterly reports within 30 days following the end of each calendar quarter which include the following information for each day during the calendar quarter:

- a. The total quantity of coal burned expressed in tons.
- b. Average percent of the ash content of the coal burned.

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