

The statement of scope for this rule, SS 047-22, was approved by the Governor on May 26, 2022, published in Register No. 798A1 on June 6, 2022, and approved by the Natural Resources Board on September 28, 2022. This rule was approved by the Governor on August 22, 2024.

**ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
REPEALING, RENUMBERING AND AMENDING, AMENDING, REPEALING AND RECREATING
AND CREATING RULES**

The Wisconsin Natural Resources Board adopts an order to **repeal** NR 439.03 (6), (8) and (12), 439.04 (2), 439.055 (1) (a), (b), (c), (d), (e), (f) and (g), (2), (5) and (6), 439.06 (3) (c) (Note), 439.07 (10), 439.075 (3) (c), 439.08 (1) (h), 439.09 (10) (b) 2., 3., 4., 5., and (d), and 484.10 Table 5 (45); to **renumber** NR 439.02 (5), and 439.09 (10) (a) 1. to 5.; to **renumber and amend** NR 439.02 (1) and (8), 439.03 (1) (b) and (c), 439.055 (1) (intro.), 439.09 (10) (intro.) and (a) (intro.); to **amend** NR 400.02 (79), 419.08 (5) and (6) (b), 439.01 (1), 439.02 (2), (4), (9), and (11), 439.03 (1) (a), (2), (3), (5), (9), and (11), 439.04 (1) (intro.), (a) (intro.) and 6., (b), and (d), (3), (4) (d), (5) (a) 2. (intro.), (c) 2. and 3., (d) 2. b., (e) 5. and 8., and (6) (a), (b) (intro.) and 2., 439.05 (title), 439.055 (3) (a), (b), and (c), and (4), 439.06 (intro.), (1), (1m), (2) (a) and (b), (3) (a) and (c), (4) (b), (5), (6) (a) and (b), (7) (b) and (9) (a) 2., 439.07 (3) (intro.), (4), (5) (a), (7) (intro.) and (8) (a) 1., (b), and (e), 439.075 (2) (title), (a) (intro.), 1., 2., 3. and 4., (b) (intro.), 1., 2., 3. and 4., (c) (intro.), 1. a. to x., 2., 3. a. to L., 4., 5. and 6. a. to e., (3) (b) and (4) (a) 1. a., b. and c., 2., 3., 4., 5. and (b), 439.08 (1) (a), (b), (c), (d), (e), (f) and (g) and (2) (a), (b) and (c), 439.085 (2) (a) 1. and 2. (intro.), (b) 1. and 2. (intro.), (c) 1. and 2. (intro.), (d) (intro.) and (3) (a) 2. (intro.) and (b) (intro.), 439.09 (1), (2), (3), (4), (7), (7m), (9) (a) and (b), and (10) (b) (intro.), 439.095 (1) (intro.) and (g), (2), and (6), 439.096 (2) (intro.), (3) (intro.), (4), (7) (intro.) and (9) (intro.), 439.098 (1) (intro.), (a), and (b), and (2) (intro.), 462 Table 6 1. a., c. and e., 2. a., c. and e., and 3. a., c. and e., 484.04 Table 2 (21m) and 484.10 Table 5 (3), (4), (25), (26), (30), (33), (41m), (42), (43), (44), (51), (52), (53), (54), (55), and (55g); to **repeal and recreate** NR 439.03 (4), 439.07 (1), (2) and (9), and 439.11; and to **create** NR 439.02 (1m), (2m), (5) (b), (5m), (6e), (6m), (6s), (9e), (9m), (9s) and (13), 439.03 (1) (b) 1., 2., and 3., (c) 1., 2., 3., 4., 5., 6., and 7., (2) (b), (3m) and (10m), 439.04 (1) (a) 7., (e) and (f), (2m), (4) (e), (f) and (g), and (5) (a) 2. c., 439.05 (4), 439.055 (1e), (1s), (2m), (3) (d), (5m) and (6m), 439.075 (4) (c) and (d), 439.09 (7p), (7r), (7t), (7v) and (10) (ag) 1. to 14., and (b) 6., 484.04 Table 2 (9e), (9m), (9s), (14m), (20c), and (20v) and 484.10 Table 5 (47g) and (55r) relating to simplifying, reducing, and making more efficient the reporting, recordkeeping, testing, inspection and determination of compliance requirements for sources of air contaminants and affecting small business.

AM-05-22

Analysis Prepared by the Department of Natural Resources

1. Statute Interpreted: Sections 285.11, 285.13(6), 285.17, 285.19, 285.65, 299.15, Stats. The State Implementation Plan developed under s. 285.11(6), Stats., is revised.

2. Statutory Authority: Sections 285.11, 285.13(6), 285.17, 285.19, 285.65, 299.15, Stats.

3. Explanation of Agency Authority:

Section 285.11, 285.13(6), Stats., requires the department to promulgate additional rules implementing ch. 285, Stats, relating to air pollution control.

Section 285.17, Stats., requires the department to establish reporting, recordkeeping, and monitoring regulations for sources of air contaminants. The statute also requires the department to reevaluate and simplify, where possible, the requirements of this chapter as they apply to minor sources.

Chapter NR 439, Wis. Adm. Code, also includes provisions related to s. 285.19, Stats., which authorizes the department to conduct inspections at air contaminant sources, and s. 285.65, Stats., which authorizes the department to include reporting, recordkeeping, and monitoring requirements in air pollution control permits.

Section 299.15, Stats., requires the department to promulgate by rule reporting requirements for sources of air contaminants.

4. Related Statutes or Rules:

Chapter NR 439, Wis. Adm. Code, establishes general reporting, recordkeeping, testing, inspection and determination of compliance requirements used to determine compliance with chs. NR 400 to 499, Wis. Adm. Code. Chapter NR 439, Wis. Adm. Code, also contains requirements for determining compliance specifically for sources of volatile organic compounds regulated under chs. NR 419 to 424, Wis. Adm. Code. Chapters NR 406 and 407, Wis. Adm. Code, reference compliance demonstration requirements in ch. NR 439, Wis. Adm. Code, for permitted sources. Updated test method standards referenced under ch. NR 439, Wis. Adm. Code, are similarly revised under chs. NR 462 and 484, Wis. Adm. Code.

5. Plain Language Analysis:

Businesses and industries that emit air pollution are subject to many rules and regulations which limit air pollution emissions to improve air quality and protect public health. Establishing ways to test, monitor and track compliance with applicable rules is a cornerstone of the Clean Air Act (CAA), and provides transparency to the public as well as certainty for the regulated facilities.

Chapter NR 439, Wis. Adm. Code, contains the requirements for reporting, recordkeeping, testing, inspection, and determination of compliance for all sources of air contaminants in the state. The primary objective of the proposed rule is to simplify, reduce, and make more efficient these requirements for the following sources:

- Sources required to have permits under the federal Clean Air Act (CAA).
- Sources required to have operation permits under s. 285.60, Stats., but not required to have permits under the CAA, as required by s. 285.17(4), Stats. These sources are sometimes referred to as “non-part 70 sources”.

The proposed changes to ch. NR 439, Wis. Adm. Code, will maintain consistency with the CAA and protect air quality.

This proposed rulemaking to revise ch. NR 439, Wis. Adm. Code, is part of the department’s ongoing effort to simplify reporting, monitoring, and recordkeeping requirements and make the process for demonstrating compliance more efficient, consistent with the applicable requirements of the CAA. The department continuously works to simplify, consolidate, and reduce frequency of reporting, monitoring, and recordkeeping requirements for all sources. The department has done this through rulemaking most recently with a Permit Streamlining rule (which became effective on October 1, 2020), by expanding permit options, improving permit and compliance processes and procedures, and creating online tools. Examples include: creating additional types of registration permits, accepting summary statements for compliance certification and monitoring requirements, offering optional electronic reporting and electronic signature for all compliance reporting, and reducing the frequency of department-required emissions testing.

In addition to the specific changes to each section described below, the department is proposing to make several types of general changes throughout ch. NR 439, Wis. Adm. Code, including:

- Clarifying that timelines set under the chapter for a particular number of days refer to *calendar* days.
- Converting timelines given in *business* days to *calendar* days to simplify deadlines and reduce the potential for confusion.
- Clearly listing the content that shall be included as part of each submittal required under the chapter.

Additionally, the department is proposing to make the following specific changes to the individual sections of ch. NR 439, Wis. Adm. Code:

NR 439.01 Applicability; purpose.

- Replace cross references to outdated state regulations with corresponding references to the underlying federal requirements, reducing the need for frequent updates.

NR 439.02 Definitions.

- Update existing definitions to reflect contemporary industry practices.
- Create definitions for undefined terms in current rule language and new terms in proposed rule language.

NR 439.03 Reporting.

- Clarify reporting requirements by specifying submittal content and deadlines, using language consistent with federal requirements in 40 CFR Part 70.
- Create efficiencies by allowing monitoring reports and compliance certifications to be combined with other required reports.
- Move the requirement for immediate notification of hazardous substance air spills from s. NR 439.03(4)(a)1. to proposed s. NR 439.03(3m) to separate it from other deviation reporting requirements that do not require immediate notification.
- Revise “next-business day reporting requirements” under s. NR 439.03(4)(am) for events that result in an emission limitation exceedance. Emission limitations include limits on the quantity, rate, or concentration of emissions of an air contaminant and only those operational or maintenance requirements that assure continuous emission reductions. Operational or maintenance requirements that assure continuous emission reductions include requirements to operate control equipment, equipment control efficiencies, or restrictions on duration of operation.
 - Instead of sources being required to report such events on the next business day, apply a tiered approach.
 - For events which cause any emission limitation to be exceeded, allow sources to report the event within 10 calendar days of the occurrence.
 - For all other deviations from permit requirements or applicable regulations, allow sources to report the event no later than the due date of the monitoring report required under s. NR 439.03(1)(b) for the reporting period during which the deviation occurred.
 - Move the exception for deviation reporting of visible emission limitations detected by a continuous emission monitor from s. NR 439.03(4)(a)2. to proposed s. NR 439.03(4)(bm). The department is also proposing to expand the exception to 20% above the opacity limit rather than 10% and revise the timeframe for the exception to use six-minute averages consistent with federal averaging periods.
 - Provide an extended timeframe of three calendar days for reporting the shutdown, breakdown or malfunction of a continuous emission monitoring system that lasts more than seven calendar days under s. NR 439.03(5).

- Delete s. NR 439.03(6) to remove advanced reporting because shutdown of required air pollution control equipment is a deviation that would be included in deviation reporting required under s. NR 439.03(4)(am).
- Move the compliance certification content requirements of s. NR 439.03(8) to s. NR 439.03(1)(c) with other compliance certification requirements. Include language consistent with federal requirements from 40 CFR Part 70. Include compliance certification requirements from 40 CFR parts 64 and 68.
- Allow for electronic signature for report certifications in addition to allowing the submittal of a hard copy of the original signature.
- Clarify that certifications, material statements and reports required by an operation permit shall be truthful, accurate and complete, consistent with the federal requirements of 40 CFR Part 70.
- Move rule language stating that no one may render inaccurate required monitoring devices or methods from s. NR 439.03(12) to s. NR 439.055(6m) to be more appropriately placed in the subsection related to parameter monitoring. Section NR 439.03 covers reporting requirements, while s. NR 439.055 covers compliance determination using air pollution control equipment.

NR 439.04 Recordkeeping.

- Clarify which sources are required to keep records under this section.
- Clarify which records sources are required to keep.
- Provide flexibility to sources by allowing records to be maintained in paper, digital or electronic formats.
- Clarify recordkeeping requirements for sources of volatile organic compounds regulated under chs. NR 422 and 423.
- Move the requirement that copies of records be retained for five years or for a period of time specified by the department from s. NR 439.04(2) to s. NR 439.05(4).

NR 439.05 Access to records; inspections.

- Update section title to be more descriptive.
- Move record retention language from s. NR 439.04(2) to s. NR 439.05(4) and add clarifying language to make consistent with federal record retention requirements.

NR 439.055 Methods and procedures for determining compliance using instrumentation of air pollution control equipment and source processes.

- Simplify repetitive text and clarify existing rule language.
- Add flexibility under sub. (4), which currently requires yearly calibration, by allowing parametric monitoring equipment to be calibrated, replaced, or validated as specified by the instrument manufacturer or as required by an applicable standard.
- Increase flexibility in monitoring and recordkeeping by removing equipment-specific monitoring parameters and frequencies under subs. (1) and (2).
- Identify the department's authority to require monitoring instrumentation in an operation permit to meet requirements under s. NR 407.09
- Identify the specific records a source is required to keep to demonstrate that the monitoring instrumentation accuracy requirements of sub. (3) and calibration, replacement and validation requirements of sub. (4) are being met.
- Move language stating that no one may render inaccurate required monitoring devices or methods from s. NR 439.03(12) to a more appropriate location under s. NR 439.055 (6m). Section NR 439.03 covers reporting requirements, while s. NR 439.055 covers compliance determination using air pollution control equipment.

- Simplify monitoring and measurement rule language and move it from sub. (5) to sub. (2m) and from sub. (6) to sub. (1r).

NR 439.06 Methods and procedures for determining compliance with emission limitations (by air contaminant).

- Update s. NR 439.06 (intro.) to indicate that nothing in ch. NR 439 precludes the use of credible evidence or information relevant to whether a source would have been in compliance with applicable requirements.
- Update and add alternative federal reference test methods for sources of PM₁₀, organic compounds, sulfur compounds, lead and nitrogen compounds.
- Add quality assurance specifications for continuous emission monitoring systems consistent with federal monitoring performance specifications for carbon monoxide, nitrogen compounds, sulfur compounds, and visible emissions.
- Delete exceptions under s. NR 439.06(3)(c) related to stage 2 vapor recovery rules, which were repealed by CR 15-077.

NR 439.07 Methods and procedures for periodic compliance emission testing.

- Clarify language under sub. (1) concerning the emission test requirements for determining compliance with the emission limitations and standards.
- Clarify the conditions under which compliance emission tests shall be performed
- Specify emission test plan and report content consistent with what is currently required by department forms and guidance.
- Clarify the required method for sampling port and platform installations.
- Update and provide alternative test methods for determining gas flow rate, heat input, boiler emission rate, and organic compound emissions.

NR 439.075 Periodic compliance emission testing requirements.

- Reduce the need to update cross references by referencing directly to current federal standards to identify sources subject to periodic testing.
- Delete compliance emission testing requirements under s. NR 439.075(3)(c) because the specific testing requirements are no longer required under the CAA 1990 Amendments.
- Provide a compliance emission testing extension for emissions units that are not in operation.
- Clarify the deadline for requesting compliance emission testing extensions.
- Add that the department shall respond to waiver and extension requests within 14 calendar days of receipt of the request.

NR 439.08 Methods and procedures for periodic fuel sampling and analysis.

- Update fuel sampling and analysis methods to currently available versions and incorporate newly available methods.

NR 439.085 Periodic fuel sampling and analysis requirements.

- Update fuel sampling and analysis methods to currently available versions.

NR 439.09 Methods and procedures for continuous emission monitoring.

- Update methods and cross references related to Continuous Emissions Monitoring Systems (CEMS) to be consistent with currently available federal methods and specifications.
- Add relevant federal performance specifications for pollutant CEMS that have become available since the last time ch. NR 439 was revised.
- Clarify the circumstances under which a full excess emission report is required in addition to a

summary excess emission report.

- Simplify the averaging period used to determine if excess emissions have occurred from emissions units monitored by CEMS.
- Provide certainty regarding excess emission report content by identifying the required information in the rule rather than relying on the current form provided by the department.

NR 439.095 Continuous emission monitoring requirements.

- Update performance specification methods.
- Set deadline for submitting QA/QC plan consistent with federal requirements.

NR 439.11 Malfunction prevention and abatement plans.

- Define malfunction prevention and abatement plan (MPAP) and limit the type of malfunctions to be included in the plan to those that may cause an applicable emission limit to be violated or may cause air pollution.
- Reduce the number of sources required to have an MPAP to only sources required to have an air pollution control permit.
- Clarify which emissions units, operations, and activities require an MPAP and exclude smaller emissions units, operations, and activities from needing an MPAP.
- Clarify plan content and submittal requirements.
- Clarify how sources will demonstrate implementation of required MPAPs by adding recordkeeping requirements.
- Identify recordkeeping requirements.
- Clarify when review and updates of MPAPs are required.

6. Summary of, and Comparison with, Existing or Proposed Federal Statutes and Regulations:

Chapter NR 439, Wis. Adm. Code, incorporates the federal compliance testing, monitoring, reporting and recordkeeping requirements of 40 CFR parts 51, 52, 60, 61, 63, 64, 68, 70, and 75. Inclusion of these federal requirements in ch. NR 439, Wis. Adm. Code, is necessary to retain EPA approval of the department's operation permit program. Revisions to sections are intended to align language with federal requirements and do not increase or decrease stringency of the requirements and do not impact the ability of the department to retain approval of its operation permit program.

NR 439.03 Reporting.

The monitoring report requirements in s. NR 439.03(1)(b), Wis. Adm. Code, are consistent with the reporting requirements in 40 CFR 70.6(a)(3)(iii)(A). The reporting requirements in s. NR 439.03(1)(b)3.c. and d. and (4), Wis. Adm. Code, are consistent with the reporting requirements in 40 CFR 70.6(a)(3)(iii)(B). The compliance certification requirements under s. NR 439.03(1)(c), Wis. Adm. Code, are consistent with the compliance certification requirements in 40 CFR 70.6(c)(5).

The department is proposing to add a requirement that the compliance certification reports include a certification statement indicating whether the source is in compliance with the applicable requirements of 40 CFR part 68 Chemical Accident Prevention provisions, under s. NR 439.03(1)(c)6., Wis. Adm. Code. This certification is required by 40 CFR 68.215(a)(2)(ii).

NR 439.04 Recordkeeping.

Section NR 439.04(1)(a), Wis. Adm. Code, requires sources to keep records of required monitoring information consistent with what is required by 40 CFR 70.6(a)(3)(ii).

NR 439.05 Access to records; access for inspections, monitoring and sampling; record retention.

Proposed rule language under s. NR 439.05(4), Wis. Adm. Code, requires retention of records of all

required monitoring information and supporting information for at least 5 years from the date of the monitoring, consistent with 40 CFR 70.6(a)(3)(ii). Section NR 439.05(4), Wis. Adm. Code, consolidates several occurrences of similar record retention language that currently exist in ch. NR 439, Wis. Adm. Code.

The proposed language specifies that support information shall include all calibration and maintenance records, original recordings for continuous monitoring instrumentation, and copies of all reports required by a permit, consistent with what is required by 40 CFR 70.6(a)(3)(ii)(B). This federal requirement does not allow a source to only keep records of a subset of this monitoring data.

NR 439.055 Methods and procedures for determining compliance using instrumentation.

Proposed s. NR 439.055(1r) and (2m), Wis. Adm. Code, are consistent with 40 CFR 70.6 which specifies that permits for existing sources contain operational, monitoring, and related recordkeeping and reporting requirements that assure and demonstrate compliance with all of a source's applicable requirements.

Proposed ss. NR 439.055(5m) and 439.11(3) and (5), Wis. Adm. Code, contain recordkeeping requirements consistent with 40 CFR 70.6(a)(3)(ii)(B).

NR 439.06, 439.07, 439.075, 439.08, 439.085, 439.09, 439.095 Methods and procedures for determining compliance with emission limitations; compliance emission testing; fuel sampling and analysis; continuous emission monitoring.

Current rule language reflects federal requirements. Revisions to these sections are intended to update, clarify and simplify, but do not increase or decrease stringency or ability of the state to meet federal requirements.

NR 439.06 Credible evidence.

The department is proposing to modify existing language related to credible evidence under s. NR 439.06, Wis. Adm. Code, to be consistent with federal credible evidence language under 40 CFR 51.212, 52.12, 60.11 and 61.12. Currently, "... the department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations", notwithstanding the compliance determination methods authorized under the chapter. To match federal language, the department is proposing to revise the current language to read: "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."

7. If Held, Summary of Comments Received During Preliminary Comment Period and at Public Hearing on the Statement of Scope:

The department held a preliminary public comment period on the statement of scope from August 15 to 22, 2022. The department received three written comments. One comment was not germane to the scope statement. The two remaining sets of comments were submitted by trade organizations. The organizations stated that ch. NR 439, Wis. Adm. Code, should be revised and included a list of changes the organizations would like the department to make during the proposed rulemaking.

The department also hosted an online preliminary public hearing on the statement of scope on August 22, 2022. Four members of the public attended the hearing. None of the attendees registered a position on the scope statement. A representative from a trade organization provided verbal comments reiterating the organization's more detailed written comments.

8. Comparison with Similar Rules in Adjacent States:

Recordkeeping and Reporting – The States of Illinois, Iowa, Michigan, and Minnesota have incorporated

recordkeeping and reporting requirements into their administrative codes. The rules vary from state to state and the key differences relative to ch. NR 439, Wis. Adm. Code, are described below.

Control Equipment Monitoring – Proposed changes to s. NR 439.055, Wis. Adm. Code, remove the specific minimum monitoring requirements for sources and air pollution control equipment in current rule language, effectively increasing flexibility for demonstrating compliance.

Illinois' general control device monitoring requirements are incorporated under s. 201.281, Illinois Administrative Code and are similar to the proposed changes to s. NR 439.055, Wis. Adm. Code. Illinois Administrative Code requires that every emission source or air pollution control device be equipped with monitoring instruments as required by its permit.

Iowa's control equipment monitoring rules are similar to the proposed changes to s. NR 439.055, Wis. Adm. Code. The monitoring requirements are determined on a case-by-case basis and included in the facility's air permit.

Michigan's control equipment monitoring requirements are incorporated under R. 336.1213(3), Michigan Administrative Code and are similar to or slightly more stringent than the proposed changes to s. NR 439.055, Wis. Adm. Code. In addition to general monitoring requirements, Michigan requires certain industries to participate in a monitoring program which meets specified requirements.

Minnesota's control equipment monitoring rules are incorporated under Minnesota Administrative Rules 7011.0080. They are similar to or slightly more stringent than the existing rules under s. NR 439.055, Wis. Adm. Code, and are more stringent than the proposed changes to s. NR 439.055, Wis. Adm. Code. Minnesota rules specify monitoring parameters for more control device technologies than are currently included under s. NR 439.055, Wis. Adm. Code.

Deviation Reporting – Proposed changes to deviation reporting under s. NR 439.03, Wis. Adm. Code, include reporting tiers depending on the severity of the occurrence and are described in detail under section #5 of this board order. The basis for deviation reporting comes from federal rule 40 CFR 70.6(a)(3)(iii)(B) which requires prompt reporting of deviations from permit requirements and specifies that “the permitting authority shall define ‘prompt’ in relation to the degree and type of deviation...”

Illinois' deviation reporting requirements are included under Section 201.530(c), Illinois Administrative Code and are more stringent than the proposed changes to s. NR 439.03, Wis. Adm. Code. Unless specified in the applicable permit-by-rule subpart, a written report of any deviation is required to be submitted within 30 days after the date the deviation occurred.

Iowa's deviation reporting requirements are included under 567 Iowa Administrative Code 22.108(5) and 24.1 and are similar to the proposed changes to s. NR 439.03, Wis. Adm. Code. Iowa's reporting timeline for excess emissions is more stringent, but the reporting of non-excess emission deviations is less stringent. The Iowa Administrative Code requires a written report regarding excess emissions to be submitted within seven days, instead of Wisconsin's proposed 10 days. Under Iowa Administrative Code, excess emissions during periods of startup, shutdown, or cleaning of control equipment are not violations and are not to be reported as long as the startup, shutdown, or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. EPA has proposed to find Iowa Administrative Code 24.1(1) as substantially inadequate under section 110(k) of the CAA because it does not comply with EPA's policy on excess emissions during periods of startup, shutdown, and malfunction (88 FR 11842). All other deviations are to be clearly identified in reports submitted at least every six months.

Michigan's deviation reporting requirements are included under Section R. 336.1213(3)(c), Michigan Administrative Code and are more stringent than the proposed changes to s. NR 439.03, Wis. Adm. Code. Michigan includes provisions that only emissions that exceed the applicable standard for greater than a specified time period need to be reported as deviations within two business days with a written report submitted within 10 days after the deviation occurred. For deviations which are less than the specified time period or which do not exceed the emissions allowed under the permit, a facility is required to submit a report of those deviations at least once every six months.

Minnesota's deviation reporting requirements are included under 7019.1000 Subpart 1 and 7007.0800 Subpart 6, Minn. Adm. Rules and are more stringent than the proposed changes to s. NR 439.03, Wis. Adm. Code. Minnesota requires deviations which could endanger human health be reported within two business days and all other deviations are to be reported in a semiannual monitoring report. Minnesota is more stringent on reporting breakdowns for more than one hour that cause any increase in emissions. Breakdown notifications are required within 24 hours of when the breakdown was discovered or reasonably should have been discovered. Minnesota requires semi-annual reporting of permit deviations which do not result in an emissions limit to be exceeded, which is similar to Wisconsin's proposed rule.

Calibration – Proposed changes to s. NR 439.055(4), Wis. Adm. Code, replace the requirement that monitoring equipment be calibrated at least yearly with a requirement that equipment be calibrated at a frequency based on written manufacturer recommendations or as required by an applicable standard, whichever is more frequent. If no such recommendations or standards exist, the time between a calibration, replacement or validation may not exceed one year.

Illinois' control device monitoring equipment calibration requirements are similar to the proposed changes in s. NR 439.055, Wis. Adm. Code. Monitoring equipment is required to be installed, calibrated, operated and maintained according to vendor specifications.

Iowa's control equipment calibration requirements are similar to the proposed changes in s. NR 439.055, Wis. Adm. Code. Permits generally specify that monitoring equipment be operated in accordance with manufacturer recommendations. Iowa retains the authority to require more frequent calibrations.

Michigan requires air-cleaning devices to be calibrated under the authority of Mich. Admin. Code R. 336.1910. This section requires that these devices be installed, maintained, and operated in a satisfactory manner and in accordance with emissions limits and existing law. This requirement is similar to the proposed changes to s. NR 439.055(4), Wis. Adm. Code. Operation in a satisfactory manner is typically defined as operating according to manufacturer recommendations.

Minnesota's control equipment calibration requirements are included under 7011.0075 Subpart 2.G., Minn. Adm. Rule and are similar to the proposed changes in s. NR 439.055, Wis. Adm. Code. All monitoring equipment for each piece of listed control equipment is required to be calibrated annually, or as required by the manufacturing specification.

Malfunction Prevention and Abatement Plan (MPAP) – Proposed changes to s. NR 439.11, Wis. Adm. Code, include defining thresholds when an MPAP is required, excluding smaller units from needing an MPAP, and clarifying plan content.

Throughout the Illinois Administrative Code, monitoring equipment is required to be installed, calibrated, operated and maintained according to vendor specifications. This requirement is similar to proposed s. NR 439.11(1r)(bm), Wis. Adm. Code, which allows a facility to consider and/or use a manufacturer

recommendation to set the interval for routine inspection, maintenance, and calibration, replacement, or validation.

Iowa's MPAP requirements are included in 567 IAC 24.2(445B). Maintenance plans are required for equipment or control equipment where the Iowa director determines that a continued pattern of excess emissions indicative of inadequate operation and maintenance is occurring. The content of Iowa's MPAP is similar to the proposed changes in s. NR 439.11, Wis. Adm. Code. Wisconsin's proposed rule provides more clarity for what emissions units need an MPAP than Iowa's rules, but Iowa would likely have less equipment subject to the MPAP requirements.

Michigan's MPAP requirements are included under Section R. 336.1911, Michigan Administrative Code. The content of the MPAP is similar to the proposed changes in s. NR 439.11, Wis. Adm. Code. However, Michigan's plan is required whenever requested by the department, while Wisconsin's MPAP requirements are based on the emissions of the specific process. Wisconsin's proposed rule provides more clarity for what emissions units need an MPAP than Michigan's rules, and Michigan has the option to be more or less stringent than Wisconsin on when a plan is required.

Under 7011.075 Subpart 2, Minn. Adm. Code, Minnesota's maintenance requirements for control equipment are included. The requirements include training, inspection timelines, and repair records for maintaining each piece of listed control equipment. These maintenance requirements are similar to and slightly more stringent than the proposed changes to s. NR 439.11, Wis. Adm. Code.

9. Summary of Factual Data and Analytical Methodologies Used and How Any Related Findings Support the Regulatory Approach Chosen:

The department is proposing updates to test methods referenced under ch. NR 439, Wis. Adm. Code. The American Society of Testing and Materials (ASTM) is an international standards organization that develops and publishes voluntary consensus technical standards for a wide variety of materials, products, systems and services. ASTM technical standards are the written procedures that provide consistent application, specification and results. ASTM technical standards are periodically created and updated. This rule package incorporates the current state of the ASTM technical standards. EPA reference methods are the technical written procedures to characterize and measure air contaminants. EPA reference methods are periodically created and updated. This rule package incorporates the current EPA reference methods.

This proposed rulemaking revises provisions related to monitoring methodology to ensure requirements related to instrument calibration, validation, and replacement reflect current technology, business operations, and maintenance strategies.

10. Analysis and Supporting Documents Used to Determine the Effect on Small Business or in Preparation of an Economic Impact Report:

The proposed changes will apply to all businesses, including small businesses, which emit or cause emissions of air contaminants ("emissions sources") subject to ch. NR 439, Wis. Adm. Code. The department estimates the cost of the rule to be \$0 because the proposed rule revisions will not impose new compliance costs on businesses. The proposed changes are intended to clarify, reduce, and make more efficient reporting, monitoring, and recordkeeping requirements.

11. Effect on Small Business (initial regulatory flexibility analysis):

No business is expected to incur additional costs in order to comply with the revised rule. Some small businesses may have reduced costs due to proposed rule changes that reduce frequency and redundancy of reporting.

12. Agency Contact Person: Maria Hill; Maria.Hill@wisconsin.gov; (608) 216-3179

13. Place where comments are to be submitted and deadline for submission: A public comment period occurred from March 18 through April 25, 2024, and a public hearing was held on April 18, 2024.

The consent of the Attorney General will be requested for the incorporation by reference of the following methods into ch. NR 484, Wis. Adm. Code:

- “Determination of PM₁₀ Emissions” (40 CFR 51 Appendix M, Method 201)
- “Determination of PM₁₀ and PM_{2.5} Emissions from Stationary Sources” (40 CFR 51 Appendix M, Method 201A)
- “Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources” (40 CFR part 51 Appendix M, Method 202)
- “Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources” (40 CFR part 60 Appendix A, Method 3C)
- “Determination of Metals from Stationary Sources” (40 CFR part 60 Appendix A, Method 29)
- “Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy” (40 CFR part 60 Appendix A, Method 320)
- “Standard Test Method for Total Moisture in Coal” (ASTM D3302/D3302M-22a)
- “Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy” (ASTM D6348-12(2020))

RULE TEXT

SECTION 1. NR 400.02 (79) is amended to read:

NR 400.02 (79) “Heat input” means the total gross calorific value per unit of time of all fuels being burned, where gross calorific value of a fuel is measured by ASTM Method ~~D240-02~~D240-19, D1826-94 (2017), or ~~D5865-04~~D5865/D5865M-19, incorporated by reference under s. NR 484.10 (4), (26), and (55g). ~~Where~~When the test method gives a higher and a lower heating value, heat input is calculated in Btu per hour using the higher heating value of the fuel.

SECTION 2. NR 419.08 (5) and (6) (b) are amended to read:

NR 419.08 (5) EMISSION CONTROL SYSTEM MONITORING. The owner or operator of any facility which uses a wet scrubber to control organic gas emissions from the catalysis of urethane cold box binders shall continuously measure and record the pH of the scrubber liquid ~~in addition to meeting the monitoring requirements of s. NR 439.055 (1) (e)~~and monitor, measure and record pressure drop across

the scrubber and demister in inches of water and scrubber liquor flow in gallons per minute once for every 8 hours of source operation or once per day, whichever yields the greater number of measurements.

(6) (b) Records of operation variables which are required to be measured under sub. (5) ~~and s. NR 439.055 (1) (e).~~

SECTION 3. NR 439.01 (1) is amended to read:

NR 439.01 (1) APPLICABILITY. This chapter applies to all air contaminant sources and to their owners and operators. For sources subject to an emission standard under ~~chs. NR 460 to 469 or under 40 CFR part 63, the requirements of ch. NR 460~~ 40 CFR parts 60 to 63, the applicable requirements of 40 CFR parts 60 to 63 apply in addition to the requirements of this chapter. In the case of ~~any~~ a conflict between applicable provisions under ~~chs. NR 460 to 469~~ 40 CFR parts 60 to 63 and provisions of this chapter, the provisions under ~~chs. NR 460 to 469~~ 40 CFR parts 60 to 63 shall apply, ~~this chapter not withstanding.~~

SECTION 4. NR 439.02 (1) is renumbered NR 439.02 (1s) and as renumbered is amended to read:

NR 439.02 (1s) “Audit ~~samples-sample~~” means a glass vials-vial, a gas cylinders-cylinder, or other materials which contain material that contains a known concentration of a pollutant that may be used for the purpose of quality assurance of certain laboratory analyses required for the determination of compliance.

SECTION 5. NR 439.02 (1m) is created to read:

NR 439.02 (1m) (a) “Adsorption” means the transferring of a gaseous pollutant from the gas stream to a solid surface, typically carbon.

(b) “Adsorption device” includes a fixed regenerable bed, a disposable or rechargeable canister, a moving bed adsorber, and a fluid bed adsorber.

SECTION 6. NR 439.02 (2) is amended to read:

NR 439.02 (2) “Baghouse” means ~~a control~~ device in which dust-laden gases are forced through a fabric bag and particulates are retained by direct interception, inertial impaction, diffusion, electrostatic attraction, or gravitational settling.

SECTION 7. NR 439.02 (2m) is created to read:

NR 439.02 (2m) “Calibration” means the comparison of a standard or instrument with a known accurate standard or instrument to detect and quantify inaccuracies, and either reduce or eliminate those inaccuracies by adjustment.

SECTION 8. NR 439.02 (4) is amended to read:

NR 439.02 (4) “~~Condensable~~Condensable particulate matter” means any material, except uncombined water, that may not be collected in the front half of the particulate matter emission sampling train but ~~which~~that exists as a solid or liquid at standard conditions.

SECTION 9. NR 439.02 (5) is renumbered NR 439.02 (5) (a).

SECTION 10. NR 439.02 (5) (b) is created to read:

NR 439.02 (5) (b) “Continuous monitoring system” includes a continuous emission monitoring system, a predictive emission monitoring system, a continuous opacity monitoring system, and a continuous parameter monitoring system.

SECTION 11. NR 439.02 (5m), (6e), (6m), and (6s) are created to read:

NR 439.02 (5m) “Deviation” means any instance in which a source is not in conformance with a permit requirement or applicable regulation, including exceedances and excursions. A deviation is not always a violation.

(6e) “Exceedance” means a condition that is detected by monitoring, testing, or other means that provides data in the same terms as an emission limitation or standard, and that indicates that emissions or opacity are greater than the applicable limitation or standard, or less than the applicable standard in the case of a percent reduction requirement, consistent with any averaging period specified for averaging the results of the monitoring or testing, or specified in the applicable emission limitation or standard.

(6m) “Excursion” means a departure from an indicator range established for monitoring under 40 CFR part 64, consistent with any averaging period specified for averaging the results of the monitoring.

(6s) “Incinerator” means an enclosed combustion device that is used to destroy pollutants. An incinerator may include an oxidizer.

SECTION 12. NR 439.02 (8) is renumbered NR 439.02 (8) (a) and (b) and as renumbered are amended to read:

NR 439.02 (8) (a) “Mechanical collector” means a ~~broad class of particulate control devices~~ device that ~~separate~~ separates solid particles from a gas stream by a combination of mechanical forces ~~which include~~ including centrifugal, gravitational, and inertial forces. ~~Such devices may include~~

(b) “Mechanical collector” includes settling chambers, cyclones, and multicyclone collectors.

SECTION 13.. NR 439.02 (9) is amended to read:

NR 439.02 (9) “Monitoring device” means ~~any instrument~~ the collection of equipment used to measure the operating parameters of a control device or process, obtain a reading, and transmit the reading to recordkeeping equipment and to the control room.

SECTION 14. NR 439.02 (9e), (9m), and (9s), are created to read:

NR 439.02 (9e) "Non-part 70 source" has the meaning given in s. NR 407.02 (5).

(9m) (a) “Oxidizer” means a combustion device used to destroy pollutants.

(b) “Oxidizer” types include direct fire, catalytic, recuperative, and regenerative.

(9s) "Part 70 source" has the meaning given in s. NR 407.02 (6).

SECTION 15. NR 439.02 (11) is amended to read:

NR 439.02 (11) “Sampling port” means an opening through the wall of a stack or duct that is used to provide access for extraction of a sample or sample analysis.

SECTION 16. NR 439.02 (13) is created to read:

NR 439.02 (13) “Validation” means the action of checking that a device meets requirements and specifications to ensure that the device fulfills its intended purpose.

SECTION 17. NR 439.03 (1) (a) is amended to read:

(1) (a) General reporting requirements. When requested by the department, a person shall furnish to the department information to locate and classify air contaminant sources according to the type, level, duration, frequency, and other characteristics of emissions ~~and such other information as may be necessary.~~ The information shall be sufficient to evaluate the source’s effect on air quality and compliance with chs. NR 400 to 499, standards of performance for new stationary sources under section

111 of the Act (42 USC 7411), or emission standards for hazardous air contaminants under section 112 of the Act (42 USC 7412).

SECTION 18. NR 439.03 (1) (b) is renumbered NR 439.03 (1) (b) (intro.) and as renumbered is amended to read:

NR 439.03 (1) (b) ~~The responsible official for a~~Monitoring reports. An owner, operator, or designee of a part 70 source which that has been issued an operation permit under s. 285.62, Stats., or an order under s. 285.13 (2), Stats., shall submit the results of monitoring required by the permit or order ~~no less often than~~ at least every 6 months, or more frequently if required by the department. An owner, operator, or designee of a non-part 70 source that has been issued an operation permit shall submit the results of monitoring required by the permit at least every 12 months. In lieu of submission of all monitoring results, a summary of the monitoring results may be submitted to the department. The summary shall include sufficient data for the department to determine whether the source is in compliance with the applicable requirements to which the monitoring relates. ~~The semiannual~~ monitoring report may be consolidated with other required reports, such as the quarterly excess emission report required under s. NR 439.09, when submission of ~~both these reports~~ more than one report is required. ~~The department may reduce the frequency of submission of this semiannual monitoring report for non-part 70 sources.~~ In addition to the reporting requirements under subs. (4) to (6), all deviations from and violations of applicable requirements shall be clearly identified in the monitoring reports. The identification of applicable information may cross-reference the permit or previous reports, as applicable. All monitoring reports shall be certified by the responsible official, as defined under s. NR 400.02 (136), consistent with subs. (10) and (10m). The responsible official required to certify the source's results of monitoring shall include in each monitoring report all of the following information:

SECTION 19. NR 439.03 (1) (b) 1., 2., and 3. are created to read:

NR 439.03 (1) (b) 1. Identification of each monitoring requirement that is the basis of the monitoring report.

2. The results of monitoring, or a summary of monitoring results, with respect to each monitoring requirement identified under subd. 1., for the period covered by the monitoring report.

3. All instances of deviations from permit requirements, which shall be clearly identified. Deviations previously reported under subs. (4) and (5) may be referenced. For each deviation, the report shall include all of the following:

- a. The affected emissions unit, operation, or activity, if applicable.
- b. The pollutant affected, if applicable.
- c. The date, time, cause, and duration of the deviation and the period of time considered necessary for correction.
- d. Any corrective actions or preventative measures that have been or will be taken to prevent future deviations.
- e. The method used to determine the deviation.

SECTION 20. NR 439.03 (1) (c) is renumbered NR 439.03 (1) (c) (intro.) and as renumbered is amended to read:

NR 439.03 (1) (c) *Compliance certifications.* After an operation permit has been issued to a source by the department, the responsible official for the source shall annually, or more frequently if specified in an applicable requirement or in the permit, certify the source's compliance status with the terms and conditions contained in the operation permit in accordance with subs. (8) and sub. (10). The methods used to determine compliance status under this paragraph shall be the same methods ~~which that~~ are required under ss. NR 407.09 (1) (c) 1 and NR 407.09(4)(a)1. The compliance certification may be consolidated with other required reports when the submission of more than one report is required. All compliance certifications shall be certified by the responsible official, as defined under s. NR 400.02 (136), consistent with subs. (10) and (10m). The responsible official required to certify the source's compliance status shall include in each certification all of the following information:

SECTION 21. NR 439.03 (1) (c) 1. to 7. are created to read:

NR 439.03 (1) (c) 1. Identification of each permit term or condition that is the basis of the compliance certification.

2. The compliance status of the source with the terms and conditions of the permit identified under subd. 1., for the period covered by the certification.

3. Information on whether compliance with the terms and conditions of the permit was continuous or intermittent. Identification of intermittent compliance may cross-reference previous reports, as applicable.

4. Identification of the methods or other means used for determining the compliance status with each term and condition of the operation permit during the certification period. Such methods and other means shall include, at a minimum, the means required under ss. NR 407.09 (1) (c) 1 and NR 407.09(4)(a)1. If applicable, the owner or operator shall also identify any other material information that must be included in the certification to comply with section 113 (c) (2) of the Act (42 USC 7413), which prohibits knowingly making a false certification or omitting material.

5. Identification of any periods during which an excursion or exceedance as defined under 40 CFR part 64 occurred, as applicable.

6. A certification statement indicating whether the source is in compliance with all applicable requirements under the 40 CFR Part 68 Chemical Accident Prevention Provisions, including the registration and submission of the risk management plan, as required under 40 CFR 68.160 and 68.150, respectively, as applicable.

7. Any other information the department may require, as specified in the operation permit, to determine the compliance status of the source.

SECTION 22. NR 439.03 (2) is renumbered NR 439.03 (2) (intro.) and (a) and as renumbered is amended to read:

NR 439.03 (2) A person requested to submit information under sub. (1) may subsequently be required to submit annually, or at ~~such~~ other intervals as specified by the department, reports and supporting information detailing ~~any~~ all of the following:

(a) Any changes in the nature of the source since the previous report and the total quantities of the air contaminants emitted.

SECTION 23. NR 439.03 (2) (b) is created to read:

NR 439.03 (2) (b) The total quantities of any hazardous air pollutants listed under section 112 (b) of the Act (42 USC 7412).

SECTION 24. NR 439.03 (3) is amended to read:

NR 439.03 (3) When requested by the department, the owner or operator of a source shall submit to the department, within 60 calendar days, a standard operating procedure ~~which that~~ includes a detailed description of process and emission control equipment startup, operating, and shutdown procedures designed to maintain compliance with emission limitations.

SECTION 25. NR 439.03 (3m) is created to read:

NR 439.03 (3m) The owner or operator of a source shall immediately notify the department of any hazardous substance air spills not in conformity with a permit as required under s. NR 445.16.

SECTION 26. NR 439.03 (4) is repealed and recreated to read:

NR 439.03 (4) (am) The owner or operator of a source shall report any event at the source that causes any emission limitation, including a visible emission limit, to be exceeded within 10 calendar days of the occurrence. The owner or operator of a source shall report to the department all of the following:

1. The affected emissions unit, operation, or activity.
2. The pollutant affected and an estimate of excess emissions, including calculations and assumptions.
3. The date, time, cause, and duration of the exceedance, the period of time considered necessary for correction, and measures taken to minimize emissions during the period.
4. Any corrective actions or preventative measures that have been or will be taken to prevent future exceedances.
5. The method used to determine the exceedance.

(bm) Exceedances of visible emission limitations detected by a continuous emission monitor that are less than 20 percent above the opacity limit for not more than 3 consecutive 6-minute average periods are exempt from reporting requirements under par. (am) and shall be reported in the quarterly excess emission reports required under s. NR 439.09 (10).

(cm) The owner or operator of a source shall report to the department any deviation from permit terms or conditions or applicable regulations not reported under par. (am) no later than the due date for the monitoring report required under sub. (1) (b) for the reporting period during which the deviation occurred. The owner or operator of a source shall report to the department all of the following:

1. The affected emissions unit, operation, or activity, if applicable.
2. The pollutant affected, if applicable.
3. The date, time, cause, and duration of the deviation and the period of time considered necessary for correction.
4. Any corrective actions or preventative measures that have been or will be taken to prevent future deviations.
5. The method used to determine the deviation.

(d) A report submitted under this subsection shall be certified by the responsible official as defined under s. NR 400.02 (136) consistent with subs. (10) and (10m).

SECTION 27. NR 439.03 (5) is amended to read:

NR 439.03 (5) The owner or operator of a source required to operate a continuous emission monitoring system or monitoring device shall notify the department ~~of within 3 calendar days following~~ any shutdown, breakdown, or malfunction of ~~such the~~ device or system ~~which is anticipated to continue in excess of one week. Notice shall occur at the next business day following the onset of the shutdown, breakdown or malfunction~~ lasting more than 7 calendar days.

SECTION 28. NR 439.03 (6) and (8) are repealed.

SECTION 29. NR 439.03 (9) is amended to read:

NR 439.03 (9) All certifications required to be submitted under sub. (1) (c) by a part 70 source shall be submitted to the administrator, if required by the administrator, and to the department.

SECTION 30. NR 439.03 (10m) is created to read:

NR 439.03 (10m) The certification of a report required under this section shall be electronically signed through an electronic signature system provided by the department or, alternatively, a hard copy of the original signature on the report may be submitted to the department.

SECTION 31. NR 439.03 (11) is amended to read:

NR 439.03 (11) All certifications made under this section and all material statements and representations made in any report or notice required by an operation permit shall be truthful, accurate, and complete.

SECTION 32. NR 439.03 (12) is repealed.

SECTION 33. NR 439.04 (1) (intro.), (a) (intro.) and (a) 6. are amended to read:

NR 439.04 (1) The owner or operator of an air contaminant source to which chs. NR 400 to 499, standards of performance for new stationary sources under section 111 of the Act (42 USC 7411), or emission standards for hazardous air contaminants under section 112 of the Act (42 USC 7412), apply shall maintain all of the following records, in paper, digital, or electronic format:

(a) Records of all sampling, testing and monitoring ~~conducted or~~ required under chs. NR 400 to 499, standards of performance for new stationary sources under section 111 of the Act (42 USC 7411), emission standards for hazardous air contaminants under section 112 of the Act (42 USC 7412), or under an air pollution control permit. Records of sampling, testing, or monitoring shall include all of the following:

6. The relevant source and control device operating conditions that existed at the time of sampling, testing, monitoring, or measurement.

SECTION 34. NR 439.04 (1) (a) 7. is created to read:

NR 439.04 (1) (a) 7. Records required by an air pollution control permit for the source and control device.

SECTION 35. NR 439.04 (1) (b) and (1) (d) are amended to read:

NR 439.04 (1) (b) Records detailing all malfunctions ~~which that~~ cause any applicable emission limitation to be exceeded, including logs to document the implementation of the plan required ~~by~~ under s. NR 439.11.

(1) (d) Any other records relating to the emission of air contaminants ~~which may be requested in writing by the department~~ that may be required to demonstrate compliance with permit conditions.

SECTION 36. NR 439.04 (1) (e) and (f) are created to read:

NR 439.04 (1) (e) Records required by any state or federal order or decree or air pollution control permit issued by the department.

(f) Records required by any standard of performance for new stationary sources under section 111 of the Act (42 USC 7411), and emission standards for hazardous air contaminants under section 112 of the Act (42 USC 7412).

SECTION 37. NR 439.04 (2) is repealed.

SECTION 38. NR 439.04 (2m) is created to read:

NR 439.04 (2m) Any owner or operator of a source claiming to be exempt from an air pollution control permit under ch. NR 405, 406, 407, or 408 shall maintain records adequate to support each exemption claim.

SECTION 39. NR 439.04 (3) and (4) (d) are amended to read:

NR 439.04 (3) Any owner or operator of ~~an air contaminant a~~ source described under chs. NR 419 to 424 shall maintain records ~~which that~~ demonstrate compliance with applicable emission limitations and operating requirements. Any owner or operator of a source claiming to be exempt from an emission limitation or other requirement ~~in~~ under chs. NR 419 to 424 shall maintain records adequate to support each exemption claim.

(4) (d) The maximum theoretical emissions as defined under s. NR 419.02 (11) of VOCs from a facility or the actual VOC emissions before consideration of controls, meeting the same applicability statement specified under each section of ch. NR 422, in the corresponding units and timeframe. ~~The maximum theoretical emissions of VOCs or the actual VOC emissions before consideration of controls~~

shall be shown in the units of VOCs per day, or per month and per 12 consecutive month period, consistent with the units in the applicability statement specified under each section of ch. NR 422.

SECTION 40. NR 439.04 (4) (e), (f) and (g) are created to read:

NR 439.04 (4) (e) Records demonstrating that a process line, facility, or source meets the conditions for an exemption under s. NR 422.03, if applicable.

(f) VOC emissions from a process line or facility, consistent with any applicability statement or exemption under any section of ch. NR 422, in the corresponding units of measure, considering control equipment as indicated in the applicability statement or exemption.

(g) Material usage for a process line or facility, consistent with any applicability statement or exemption under any section of ch. NR 422, in the corresponding units of measure, considering control equipment as indicated in the applicability statement or exemption.

SECTION 41. NR 439.04 (5) (a) 2. (intro.) is amended to read:

NR 439.04 (5) (a) 2. The VOC content of each coating or ink, ~~as applied,~~ delivered to each coating applicator in any of the following units, as applicable:

SECTION 42. NR 439.04 (5) (a) 2. c. is created to read:

NR 439.04 (5) (a) 2. c. Pounds of VOCs per pound of coating solids.

SECTION 43. NR 439.04 (5) (c) 2. and 3., (d) 2. b., (e) 5. and 8., and (6) (a), (b) (intro.) and (b) 2. are amended to read:

NR 439.04 (5) (c) 2. The surface area in units of square feet ~~square~~ of coated finished product.

3. The amount of VOC per area of surface to which coatings are applied in units of pounds of VOC per 1,000 ~~ft~~²square feet, regardless of the number of coats applied.

(d) 2. b. A ~~log of record~~ log of record that documents and correlates the operating time for the capture system, control device, monitoring equipment, and the associated coating or printing line or operation.

(e) 5. ~~The~~ For sources subject to an emission limitation under ch. NR 422 that is expressed in units of pounds of VOC per gallon of coating or ink, excluding water, certification of the efficiency of

any capture system used in conjunction with s. NR 422.04 (2) (b), (c), and (d) and the total allowable emissions as calculated under s. NR 422.04 (4) for any day 95 percent overall control is not achieved.

8. A ~~log of~~ record that documents and correlates operating time for the capture system, control device, monitoring equipment, and the associated coating or printing line or operation.

(6) (a) If an owner or operator of a solvent cleaning operation ~~employs a thermal incinerator or catalytic incinerator~~ uses an incinerator or oxidizer control device to achieve and maintain compliance as allowed in any section ~~in~~ under ch. NR 422 or ~~in~~ under s. NR 423.037, the owner or operator shall comply with all of the following requirements:

1. Continuous temperature monitoring and continuous temperature recording equipment shall be installed and operated to accurately measure the operating temperature for the control device as identified under s. NR 439.055.

2. ~~The~~ All of the following information shall be collected and recorded ~~each day of~~ during operation of the solvent cleaning operation and the control device, ~~and the information shall be maintained at the facility for a period of 5 years:~~

a. A ~~log or record of~~ that documents and correlates the operating time for the capture system, control device, monitoring equipment, and the associated solvent cleaning operation.

b. For thermal incinerators and oxidizers, the combustion temperature during all 3-hour ~~periods of~~ operation ~~during which the average combustion temperature was more than 50 degrees Fahrenheit below the average combustion temperature during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance~~ average periods.

c. For catalytic incinerators and oxidizers, the catalyst bed inlet temperature for all 3-hour ~~periods of~~ operation ~~during which the average temperature of the dryer exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature of the dryer exhaust gases during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance,~~ and all 3-hour periods during which the average temperature difference across the catalyst bed was less than 80% of the average temperature difference during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance average periods.

(b) If an owner or operator of a solvent cleaning operation ~~employs~~ uses a carbon adsorption system to achieve and maintain compliance as allowed in any section ~~in~~ under ch. NR 422 or ~~in~~ under s. NR 423.037, the owner or operator shall comply with all of the following requirements:

2. ~~The~~ All of the following information shall be collected and recorded ~~each day of~~ during operation of the solvent cleaning operation and the carbon adsorption system, ~~and the information shall be maintained at the facility for a period of 5 years:~~

a. A ~~log or record of that documents and correlates~~ the operating time for the carbon adsorption system, monitoring equipment, and the associated solvent cleaning operation.

b. For a carbon adsorption system that ~~employs~~ uses a continuous emission monitoring and recording system to measure and record the concentration of organic compounds in the exhaust gases, the organic compound concentration for all 3-hour periods of operation during which the average concentration level or reading in the exhaust gases is more than 20% greater than the exhaust gas organic compound concentration level or reading measured by the most recent performance test that demonstrated that the solvent cleaning operation was in compliance average periods.

c. For a carbon adsorption system that ~~employs~~ uses monitoring and recording equipment to measure and record the total mass steam flow rate for each regeneration cycle of each carbon bed, ~~all carbon bed regeneration cycles during which the total mass steam flow rate was more than 10% below the total mass steam flow rate during the most recent performance test that demonstrated that the solvent cleaning operation was in compliance~~ the total mass steam flow rate for each carbon bed regeneration cycle.

d. For a carbon adsorption system that ~~employs~~ uses monitoring and recording equipment to measure and record the temperature of each carbon bed after each regeneration and cooling cycle, ~~all carbon bed regeneration cycles during which the temperature of the carbon bed after the regeneration and cooling cycle was more than 10% greater than the carbon bed temperature during the most recent performance test that demonstrated that the solvent cleaning operation was in compliance~~ the temperature of each carbon bed after each regeneration and cooling cycle.

SECTION 44. NR 439.05 (title) is amended to read:

NR 439.05 (title) Access to records; access for inspections, monitoring, and sampling; record retention.

SECTION 45. NR 439.05 (4) is created to read:

NR 439.05 (4) The owner or operator of a source shall retain records of all required monitoring data and supporting information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application, unless a longer retention period is specified by the department. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation or equivalent data output, and copies of all reports required by the department.

SECTION 46. NR 439.055 (1) (intro.) is renumbered to NR 439.055 (1m) and as renumbered is amended to read:

NR 439.055 (1m) The department may require the owner or operator of a source to install and operate instrumentation to monitor the operation of the source ~~or of and~~ air pollution control equipment. ~~Unless otherwise specified by the department, for the following types of air pollution control equipment, the indicated operational variables shall, at a minimum, be monitored:~~

SECTION 47. NR 439.055 (1) (a) to (g) are repealed.

SECTION 48. NR 439.055 (1e) and (1s), are created to read:

NR 439.055 (1e) In this section, “accuracy” or “accurate” means the closeness of an indicator or reading of a measurement device to the actual value of the quantity being measured; usually expressed as \pm percent of the full-scale output or reading.

(1s) The department may require, in an operation permit, the installation and operation of instrumentation to monitor the operation of the source and air pollution control equipment to meet the requirements under s. NR 407.09 (1) (c) 1. and (4) (a) 1.

SECTION 49. NR 439.055 (2) is repealed.

SECTION 50. NR 439.055 (2m) is created to read:

NR 439.055 (2m) The department may require, in an air pollution control permit or order, the measurement of source or air pollution control operational variables if the department determines that these requirements are necessary to ensure that the source does not exceed an applicable emission limit or to ensure that the requirements of chs. NR 400 to 499, standards of performance for new stationary

sources under section 111 of the Act (42 USC 7411), or emission standards for hazardous air contaminants under section 112 of the Act (42 USC 7412) are met.

SECTION 51. NR 439.055 (3) (a) to (c) are amended to read:

NR 439.055 (3) (a) The temperature monitoring device shall have an accuracy of 0.5% percent of the temperature being measured in degrees Fahrenheit or $\pm 5^{\circ}\text{F}$ of the temperature being measured, or the equivalent in degrees Celsius (centigrade), whichever is greater.

(b) The pressure drop monitoring device shall be accurate to within 5% percent of the pressure drop being measured ~~or within ± 1 inch of water column, whichever is greater.~~

(c) The current, voltage, flow or pH monitoring device shall be accurate to within 5% percent of the specific variable being measured.

SECTION 52. NR 439.055 (3) (d) is created to read:

NR 439.055 (3) (d) Unless otherwise specified by the department, all other parameter monitoring devices shall be accurate to within 5 percent of the specific variable being measured.

SECTION 53. NR 439.055 (4) is amended to read:

NR 439.055 (4) All instruments used for measuring source or air pollution control equipment operational variables shall be calibrated ~~yearly or at a frequency based on good engineering practice as established by operational history,~~ replaced, or validated at a frequency based on written manufacturer recommendations or as required by an applicable standard, whichever is more frequent. If there is not a maximum interval recommended by the manufacturer or as required by an applicable standard, the time between calibrations, replacements, or validations may not exceed one year.

SECTION 54. NR 439.055 (5) is repealed.

SECTION 55. NR 439.055 (5m) is created to read:

NR 439.055 (5m) The owner or operator shall maintain records of the accuracy and calibrations, replacements, and validations for all instruments used for measuring source or air pollution control equipment operational variables, including the date the calibration, replacement, or validation was conducted and the accuracy of the monitoring device in percent of the variable being measured.

SECTION 56. NR 439.055 (6) is repealed.

SECTION 57. NR 439.055 (6m) is created to read:

(6m) No person may render inaccurate any monitoring device or method required under this chapter or in an air pollution control permit.

SECTION 58. NR 439.06 (intro.), (1), (1m), (2) (a) and (b), and (3) (a) and (c) are amended to read:

NR 439.06 Methods and procedures for determining compliance with emission limitations (by air contaminant). When tests or a continuous monitoring system are required by the department, the owner or operator of a source shall use the reference methods listed ~~in~~under this section and ~~in~~under ss. NR 439.07 to 439.095 to determine compliance with emission limitations, unless an alternative or equivalent method is approved, or a specific method is required, in writing, by the department. Any alternative, equivalent, or other specific method approved or required by the department for an ozone precursor shall be submitted to, and will not become effective for federal purposes until approved by, the administrator or designee as a source-specific revision to the department's state implementation plan for ozone. The test methods shall include quality control and quality assurance procedures and the data reporting format ~~which~~that are specified and approved by the department for collection, analysis, processing, and reporting of compliance monitoring data. ~~Notwithstanding the compliance determination methods which the owner or operator of a source is authorized to use under this chapter, the department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations. 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.~~

(1) NONFUGITIVE PARTICULATE MATTER EMISSIONS. The owner or operator of a source shall use Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13), and when required, Method 202 in 40 CFR part 51, Appendix M, incorporated by reference ~~in~~under s. NR 484.04 (9), to determine compliance with a nonfugitive particulate matter emission limitation.

(1m) NONFUGITIVE PM₁₀ PARTICULATE EMISSIONS. The owner or operator of a source shall use Method 201 or 201A and 202 in 40 CFR part 51, Appendix M, incorporated by reference ~~in~~under s. NR 484.04 (9), to determine compliance with a nonfugitive PM₁₀ particulate matter emission limitation.

(2) (a) Perform compliance emission testing following Method 6, 6A, 6B, 6C, ~~or 8,~~ or 320 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~-under s. NR 484.04 (13) or ASTM D6348-12 (2020), incorporated by reference under s. NR 484.10 (55r).

(b) Install, calibrate, maintain, and operate a continuous emission monitor that meets the applicable performance specifications ~~in~~-under 40 CFR part 60, ~~Appendix~~-Appendices B and F or, for affected units, the performance specifications ~~in~~-under 40 CFR part 75, Appendices A to I, incorporated by reference ~~in~~-under s. NR 484.04 (21), (21m), and (27). The owner, ~~or operator,~~ or designee of the source shall submit a quality control and quality assurance plan for approval by the department. The monitor shall follow the plan, as approved by the department.

(3) (a) Method 18, 25, 25A, ~~or 25B,~~ or 320 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~-under s. NR 484.04 (13), or ASTM D6348-12 (2020), incorporated by reference under s. NR 484.10 (55r), shall be used to determine organic compound emission concentrations or emission rates.

(c) Method 21 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~-under s. NR 484.04 (13), shall be used to detect organic compound emission leaks ~~except as provided in par. (i) 2. or 3.~~

SECTION 59. NR 439.06 (3) (c) (Note) is repealed.

SECTION 60. NR 439.06 (4) (b), (5), (6) (a) and (b), (7) (b), and (9) (a) 2. are amended to read:

(4) (b) Install, calibrate, maintain, and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, ~~Appendix~~-Appendices B and F, incorporated by reference ~~in~~-under s. NR 484.04 (21) and (21m), 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 or 29 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~-under s. NR 484.04 (13), to determine compliance with a lead emission limitation.

(6) (a) Method 7, 7A, 7B, 7C, 7D, ~~or 7E,~~ or 320 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~-under s. NR 484.04 (13), or ASTM D6348-12 (2020), incorporated by reference under s. NR 484.10 (55r).

(b) Install, calibrate, maintain, and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, ~~Appendix~~ Appendices B and F, or, for affected sources, the performance specifications in 40 CFR part 75, Appendices A to I, incorporated by reference ~~in~~ under s. NR 484.04 (21), (21m), and (27). The owner, ~~or~~ operator, or designee of the source shall submit and follow the quality control and quality assurance plan for the monitor, which has been approved by the department.

(7) (b) Install, calibrate, maintain, and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, ~~Appendix~~ Appendices B and F, incorporated by reference ~~in~~ under s. NR 484.04 (21) and (21m), 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.

(9) (a) 2. Install, calibrate, maintain, and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, ~~Appendix~~ Appendices B and F or 40 CFR part 75, Appendices A to I, incorporated by reference ~~in~~ under s. NR 484.04 (21), (21m), and (27), and follow a quality control and quality assurance plan for the monitor, which has been approved by the department.

SECTION 61. NR 439.07 (1) and (2) are repealed and recreated to read:

NR 439.07 (1) GENERAL. All emission tests conducted for the purpose of determining compliance with an emission limitation under chs. NR 400 to 499, standards of performance for new stationary sources under section 111 of the Act (42 USC 7411), or emission standards for hazardous air contaminants under section 112 of the Act (42 USC 7412), shall be performed according to the test methods established in 40 CFR part 60, Appendix A, 40 CFR part 61, Appendix B, and 40 CFR part 63, Appendix A, incorporated by reference under s. NR 484.04 (13), (23), and (25), or according to other test methods approved in writing by the department. The owner or operator of a source, or a contractor responsible for emission testing, shall follow the procedures in this section. All compliance emission tests shall be performed with the equipment operating at capacity or as close to capacity as practicable or under other conditions as specified in an applicable requirement or approved by the department.

(2) **EMISSION TEST NOTIFICATION AND TEST PLAN SUBMITTAL.** The owner, operator, or designee of a source shall notify the department in writing at least 30 calendar days in advance of a compliance emission test, including initial certification tests and relative accuracy tests performed under s. NR 439.09, to provide the department an opportunity to have a representative present to witness the testing

procedures. The notice shall provide a test plan that includes all of the following information for the emissions unit to be tested:

(a) A description of the reference test methods, analytical test methods, and quality assurance and quality control procedures to be used.

(am) A description of any planned or anticipated reference method or analytical test method deviation and a copy of any reference method or analytical test method deviation approval.

(b) A description of each emissions unit, including fuel types and maximum design capabilities.

(c) A description of the emissions unit operating parameters and an explanation of how the emissions unit will be operated during the test.

(cm) A description of the control device associated with each emissions unit.

(cp) A description of the control device operating parameters and an explanation of how the control device will be monitored during the test.

(d) The proposed test date, starting time of the test, and test schedule.

(dm) The expected duration and number of sampling runs for each reference test method.

(e) A description of the number and location of the sampling ports and sampling points including a diagram showing the distance of the sampling ports from the nearest upstream and downstream flow disturbances and the stack dimensions for each measurement location.

(f) A statement indicating the production rate and the operating conditions at which the test will be conducted.

(g) Facility name, physical address, city, state, and zip code.

(h) Facility contact name and phone number.

(i) Facility identification number and active permit numbers.

(j) Stack numbers, emissions unit numbers, and control device numbers.

(k) Pollutant emission limitations.

(L) List of the applicable rules, orders, and permit conditions requiring the test.

(m) Test firm name, address, city, state, and zip code.

(n) Test firm contact name and phone number.

SECTION 62. NR 439.07 (3) (intro.), (4), (5) (a), (7) (intro.), and (8) (a) 1., (b), and (e) are amended to read:

NR 439.07 (3) TEST PLAN EVALUATION. In evaluating the test plan, the department shall respond to the source owner or operator within ~~10 business~~14 calendar days of receipt of the plan ~~and if~~ amendments are needed. If the department does not respond within 14 calendar days, the test may proceed as described in the test plan. The department may require any of the following:

(4) NOTIFICATION OF TEST PLAN REVISION. ~~The source owner, or operator, or designee of a source shall notify the department of any modifications to the test plan at least 5 business~~7 calendar days prior to the test. In the event the owner or operator is unable to conduct the compliance emission test on the date specified in the test plan, due to unforeseeable circumstances beyond the owner or operator's control, the owner or operator of a source shall notify the department at least ~~5 business~~7 calendar days prior to the scheduled compliance emission test date and specify the date when the test is rescheduled or arrange a rescheduled date with the department.

(5) (a) The installation of sampling ports and safe sampling platforms meeting the requirements of EPA Method 1.

(7) EMISSION TESTING EQUIPMENT CALIBRATION REQUIREMENTS. The following components of any emission sampling train or associated sampling equipment shall be calibrated not more than 60 calendar days before the test:

(8) (a) 1. The gas flow rate, in dry standard cubic feet per minute, shall be determined during each repetition of an emission test using Method 1, 1A, 2, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 3, 3A, 3B, 3C, and 4 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13), as applicable.

(b) Particulate matter. When compliance with a particulate matter emission limitation is determined using Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13), the test shall consist of 3 representative repetitions. In addition, all of the following provisions apply:

1. Sootblowing shall be performed during one repetition of each test for particulate matter emissions on any boiler that routinely employs sootblowing, unless the boiler uses a continuous sootblowing system. If a continuous sootblowing system is operating during the test, compliance with the emission limitation shall be determined by the arithmetic mean of the results of all repetitions. If a continuous sootblowing system is not operating during the test, the representative average pounds of particulate matter emissions per million Btu heat input shall be determined by the following equation:

$$E = E_s ((A + B) S/AR) + E_{ns}((R - S)/R - (BS/AR))$$

where:

E is the weighted average pounds of particulate matter per million Btu heat input

E_s is the pounds of particulate matter per million Btu heat input for test runs during sootblowing

E_{ns} is the arithmetic average pounds of particulate matter per million Btu heat input for test runs with no sootblowing

A is the hours of sootblowing during test runs containing sootblowing

B is the hours with no sootblowing during test runs containing sootblowing

R is the average hours of boiler operation per 24 hours

S is the average hours of sootblowing per 24 hours

2. Each repetition for a particulate ~~emission~~matter emissions test shall have a sample volume of at least 30 dry standard cubic feet.

3. Method 17, for ~~particulates~~particulate matter emissions, in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13), may not be used where stack or duct temperatures exceed 320°F.

4. Heat input shall be equal to the fuel use rate multiplied by the heat content of the fuel on an as-fired basis. Fuels shall be analyzed for heat content using the procedures in Method 19 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13). Alternately, heat input may be determined using a continuous emission monitor that meets the applicable performance specifications in

40 CFR part 60, Appendices B and F, or, for affected sources, the performance specifications in 40 CFR part 75, Appendices A to I, incorporated by reference under s. NR 484.04 (21), (21m), and (27).

5. Any boiler emission rate in pounds per million Btu heat input shall be determined using the heat input based on fuel use rate. The emission rate may be determined using the F-Factor calculation shown in Method 19 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13), ~~with written approval from the department.~~ If the F-Factor method is used, an ultimate fuel analysis shall be performed. An integrated gas sample, using Method 3, 3A, ~~or 3B,~~ or 3C in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13), shall be collected and analyzed for oxygen and carbon dioxide content. Other methods for determining the boiler heat input may be used only if approved, in writing, by the department.

6. If cyclonic flow is a possibility at a particulate matter emission test location, a test for the presence of cyclonic flow shall be performed before the particulate matter test using the procedures in Method 1 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13). If cyclonic flow is present, the flow must be straightened before testing can begin unless the source owner or operator demonstrates, to the department's satisfaction, the acceptability of the location using the alternate procedure to Method 1. If cyclonic flow is not present, testing can proceed.

7. Except for sources subject to emission testing requirements ~~in ch. NR 440~~under 40 CFR part 60, the department may require the owner or operator of a source capable of emitting ~~condensable~~condensable particulate matter, to include an analysis of the back half of the stack sampling train catch in the total particulate catch for any emission test using Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17, in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13). This procedure and analysis shall be performed using Method 202 in 40 CFR part 51, Appendix M, incorporated by reference ~~in~~under s. NR 484.04 (9).

(e) *Organic compound emissions.* When compliance with an organic compound emission limitation is determined using Methods 18, 25, 25A, ~~or 25B,~~ or 320 in 40 CFR part 60, Appendix A, incorporated by reference ~~in~~under s. NR 484.04 (13), or ASTM D6348-12 (2020), incorporated by reference under s. NR 484.10 (55r), the test shall consist of a minimum of 3 representative repetitions.

SECTION 63. NR 439.07 (9) is repealed and recreated to read:

(9) EMISSION TEST REPORTING REQUIREMENTS. For compliance emission tests, including initial certification tests and relative accuracy tests performed under s. NR 439.09, the owner, operator, or

designee of the source tested shall submit to the department an emission test report within 60 calendar days after completion of a compliance emission test. If requested, the department may grant an extension of up to 30 calendar days for test report submittal. The failure to include any information required under this subsection in an emission test report may result in rejection of the test report submittal. The emission test report shall include all of the following information for the emissions unit tested:

- (a) A detailed description of each emissions unit and control device.
- (am) A detailed description of the reference test methods, analytical test methods, and quality control and quality assurance procedures used during the test.
- (ap) A description of any reference method or analytical test method deviation and a copy of any reference method or analytical test method deviation approval.
- (as) The date, start and end times, duration, and number of sampling runs for each reference method and analytical test method.
- (b) The operating conditions and parameters recorded at each emissions unit, including fuel type and sootblowing, and any associated air pollution control device during the test.
- (c) A summary of test results expressed in units consistent with emission limitations applicable to the source.
- (d) Sample calculations showing all the formulas used to calculate the reference test method and analytical test method results.
- (e) The raw field and laboratory data for each repetition of each test.
- (f) Calibration data for each reference method and analytical test method used during the test.
- (g) The results of any quality assurance audit sample analyses required in each reference method or analytical test method.
- (h) The results of any visible emission evaluations performed by the tester or source owner or operator and a copy of the visible emission certificate.
- (i) A copy of any steam, opacity, or airflow charts made during the test.
- (j) The report of any fuel analysis performed on the fuel burned during the test.

(k) Documentation of any emissions unit or control device upset conditions occurring during the test.

(L) An explanation of any excessive variation in the results when comparing the repetitions of the compliance emission test.

(m) If the compliance emission test being conducted is a retest, the changes made to the emissions unit or control device since the last test.

(n) A description of the number and location of the sampling ports and sampling points including a diagram showing the distance of the sampling ports from the nearest upstream and downstream flow disturbances and the stack dimensions for each measurement location.

(o) A copy of chain of custody forms.

(p) Facility name, physical address, city, state, and zip code.

(q) Facility contact name and phone number.

(r) Facility identification number and active permit number.

(s) Stack number, emissions unit number, and control device number.

(t) Applicable rules and permit conditions requiring the tests be conducted.

(u) Test firm name, address, city, state, and zip code.

(v) Test firm contact and phone number.

(w) Analytical subcontractor name, contact name, and phone number.

(x) A statement certifying all methodologies were performed according to the written procedures and represent true and accurate data.

SECTION 64. NR 439.07 (10) is repealed.

SECTION 65. NR 439.075 (2) (title), (a) (intro.), 1., 2., 3. and 4., (b) (intro.), 1., 2., 3. and 4., (c) (intro.), 1. a. to x., 2., 3. a. to L., 4., 5., 6. a. to e. and (3) (b) are amended to read:

NR 439.075 (2) AFFECTED EMISSION POINTS ~~UNITS~~ AND AIR CONTAMINANTS REQUIRING TESTING.

(a) Except as provided ~~in~~under sub. (4), the owner or operator of a source identified in this paragraph, with an ~~emission point~~emissions unit that has allowable emissions of particulate matter, sulfur dioxide, or volatile 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~~under sub. (3) as follows:

1. Compliance emission testing for particulate matter is required for an ~~emission point~~emissions unit subject to a particulate matter emission limitation under ch. NR 405 or ~~in~~under 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~~emissions unit subject to a sulfur dioxide emission limitation under ch. NR 405 or ~~in~~under 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~~under s. NR 417.07 (1) (b).

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

4. Compliance emission testing for volatile organic compounds is required for an ~~emission point~~emissions unit subject to an emission limitation in s. NR 421.03, 421.04, 422.05 to 422.08, 422.09 to 422.155, 423.05, or 424.03 to 424.05 ~~which that~~ 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~~emissions unit.

(b) The owner or operator of a source, subject to the requirements ~~of~~under ch. NR 427-~~or~~, chs. NR 445 to 449, or 40 CFR part 61 Subparts C, D, E, F, or M, shall perform compliance emission testing for lead, mercury, beryllium, or vinyl chloride according to the testing schedules ~~in~~under sub. (3)-as follows:

1. Compliance emission testing for mercury is required for an ~~emission point~~emissions unit subject to s. NR 446.08 (1) or 446.21 (1), (2), or (3), or 40 CFR s. 61.53 (a), (b), or (c).

2. Compliance emission testing for beryllium is required for an ~~emission point~~emissions unit identified ~~in~~under s. NR 448.03 (1) or 40 CFR s. 61.30.

3. Compliance emission testing for vinyl chloride is required for an ~~emission point emissions unit~~ identified ~~in~~under s. NR 449.04, 449.05, or 449.06 (1), (2), (3), or (4), or 40 CFR ss. 61.62, 61.63, or 61.64 (a), (b), (c), or (d) and for any control system to which reactor emissions are required to be ducted ~~in~~under s. NR 449.06 (1) (b) or (5) (a) or (b) or 40 CFR ss. 61.64 (a) (2) or (e) (1) or (2) or to which fugitive emissions are required to be ducted ~~in~~under s. NR 449.07 (2) (a), (b), (c), (e), (f), or (i) or 40 CFR ss. 61.65 (b) (1), (2), (3), (5), (6), or (9).

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

(c) Except as provided ~~in~~under sub. (4), the owner or operator of a source identified in this paragraph ~~which that~~ is subject to the requirements ~~of ch. NR 440~~under 40 CFR part 60 shall perform compliance emission testing for the following air contaminants according to the testing schedules ~~in~~under sub. (3):

1. a. Fossil fuel fired steam generators subject to ~~s. NR 440.19 or 440.20~~40 CFR part 60 Subpart D or Da.

b. Incinerators subject to ~~s. NR 440.21~~40 CFR part 60 Subpart E.

c. Kilns at Portland cement plants subject to ~~s. NR 440.22~~40 CFR part 60 Subpart F.

d. Dryers at asphalt concrete plants subject to ~~s. NR 440.25~~40 CFR part 60 Subpart I with a rated capacity of 250 tons per hour or more at ~~5%~~percent moisture removal.

e. Fluid catalytic cracking unit catalyst regenerators and fuel gas combustion devices at petroleum refineries subject to ~~s. NR 440.26~~40 CFR part 60 Subpart J.

f. Pot, cupola, and reverberatory furnaces at secondary lead smelters subject to ~~s. NR 440.29~~40 CFR part 60 Subpart L.

g. Cupola, electric arc, and reverberatory furnaces at secondary brass and bronze ingot production plants subject to ~~s. NR 440.30~~40 CFR part 60 Subpart M.

h. Basic oxygen process furnaces at iron and steel plants subject to ~~s. NR 440.31~~40 CFR part 60 Subpart N.

- i. Incinerators at sewage treatment plants subject to ~~s. NR 440.32-40~~ CFR part 60 Subpart O.
- j. Dryers at primary copper smelters subject to ~~s. NR 440.33-40~~ CFR part 60 Subpart P.
- k. Sintering machines at primary zinc smelters subject to ~~s. NR 440.34-40~~ CFR part 60 Subpart Q.
- L. Blast furnaces, dross reverberatory furnaces, and sintering machines at primary lead smelters subject to ~~s. NR 440.35-40~~ CFR part 60 Subpart R.
- m. Thermal dryers and pneumatic coal cleaning equipment at coal preparation plants subject to ~~s. NR 440.42-40~~ CFR part 60 Subpart Y.
- n. Electric arc furnaces and dust handling equipment at ferroalloy production facilities subject to ~~s. NR 440.43-40~~ CFR part 60 Subpart Z.
- o. Electric arc furnaces at steel plants subject to ~~s. NR 440.44-40~~ CFR part 60 Subpart AA.
- p. Electric arc furnaces and argon-oxygen decarburization vessels at steel plants subject to ~~s. NR 440.445-40~~ CFR part 60 Subpart AAa.
- q. Recovery furnaces, smelt dissolving tanks, and lime kilns at kraft pulp mills subject to ~~s. NR 440.45-40~~ CFR part 60 Subpart BB.
- r. Melting furnaces at glass manufacturing plants subject to ~~s. NR 440.46-40~~ CFR part 60 Subpart CC.
- s. Kilns at lime manufacturing plants subject to ~~s. NR 440.51-40~~ CFR part 60 Subpart HH.
- t. Control devices at metallic mineral processing plants with sources subject to ~~the requirements of s. NR 440.525-40~~ CFR part 60 Subpart LL.
- u. Dryers, calciners, and grinders at phosphate rock plants subject to ~~s. NR 440.54-40~~ CFR part 60 Subpart NN.
- v. Ammonium sulfate dryers at ammonium sulfate manufacturing plants subject to ~~s. NR 440.55-40~~ CFR part 60 Subpart PP.
- w. Saturators and blowing stills at asphalt processing and asphalt roofing manufacturing plants subject to ~~s. NR 440.59-40~~ CFR part 60 Subpart UU.

x. Rotary spun wool fiberglass insulation manufacturing lines at wool fiberglass insulation plants subject to ~~s. NR 440.69~~ 40 CFR part 60 Subpart PPP.

2. Compliance emission testing for sulfur dioxide is required for fossil fuel fired steam generators subject to ~~s. NR 440.19 or 440.20~~ 40 CFR part 60 Subpart D or Da.

3. a. Control devices at facilities subject to the surface coating of metal furniture requirements ~~in~~ s. NR 440.48 under 40 CFR part 60 Subpart EE.

b. Control devices at facilities subject to the automobile and light-duty truck surface coating requirements ~~in~~ s. NR 440.53 under 40 CFR part 60 Subpart MM.

c. Control devices at facilities subject to the graphic arts industry requirements ~~in~~ s. NR 440.56 under 40 CFR part 60 Subpart QQ.

d. Control devices at facilities subject to the pressure sensitive tape and label surface coating requirements ~~of~~ s. NR 440.565 under 40 CFR part 60 Subpart RR.

e. Control devices at facilities subject to the large appliance surface coating requirements ~~in~~ s. NR 440.57 under 40 CFR part 60 Subpart SS.

f. Control devices at facilities subject to the metal coil surface coating requirements ~~in~~ s. NR 440.58 under 40 CFR part 60 Subpart TT.

g. Control devices at facilities subject to the beverage can surface coating requirements ~~of~~ s. NR 440.63 under 40 CFR part 60 Subpart WW.

h. Control devices at bulk gasoline terminals subject to the requirements ~~in~~ s. NR 440.64 under 40 CFR part 60 Subpart XX.

i. Control devices at facilities subject to the flexible vinyl and urethane coating and printing requirements ~~of~~ s. NR 440.65 under 40 CFR part 60 Subpart FFF.

j. Control devices at synthetic organic chemical manufacturing facilities subject to the requirements ~~of~~ s. NR 440.675, 440.686 or 440.705 under 40 CFR part 60 Subparts III, NNN, or RRR.

k. Control devices at facilities subject to the magnetic tape coating requirements ~~of~~ s. NR 440.71 under 40 CFR part 60 Subpart SSS.

L. Control devices at facilities subject to the polymeric coating of supporting substrate requirements of ~~s. NR 440.74~~ under 40 CFR part 60 Subpart VVV.

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~~ 40 CFR part 60 Subpart KK.

5. Compliance emission testing for nitrogen oxides is required for fossil fuel fired steam generators subject to ~~s. NR 440.19 or 440.20~~ 40 CFR part 60 Subpart D or Da.

6. a. Reactors, filters, evaporators, and hot wells at wet process phosphoric acid plants subject to ~~s. NR 440.37~~ 40 CFR part 60 Subpart T.

b. Evaporators, hot wells, acid sumps, and cooling tanks at super phosphoric acid plants subject to ~~s. NR 440.38~~ 40 CFR part 60 Subpart U.

c. Reactors, granulators, dryers, coolers, screens, and mills at diammonium phosphate plants subject to ~~s. NR 440.39~~ 40 CFR part 60 Subpart V.

d. Mixers, curing belts or dens, reactors, granulators, dryers, cookers, screens, mills, and facilities ~~which that~~ store run-of-pile material at triple superphosphate plants subject to ~~s. NR 440.40~~ 40 CFR part 60 Subpart W.

e. Storage or curing piles, conveyors, elevators, screens, and mills at granular triple superphosphate storage facilities subject to ~~s. NR 440.41~~ 40 CFR part 60 Subpart X.

(3) (b) Unless otherwise required by statute, rule, or permit condition, the owner or operator of a ~~direct~~ stationary source ~~which that~~ has received an operation permit shall perform the compliance emission tests required under sub. (2) every 24 months as long as the permit ~~remains valid~~ is required. Each biennial test shall be performed ~~within no later than 90 calendar days of~~ after the anniversary date of the ~~issuance of the permit~~ previous test or ~~within no later than 90 calendar days of~~ after an alternate date specified by statute, rule, permit condition, or by the department.

SECTION 66. NR 439.075 (3) (c) is repealed.

SECTION 67. NR 439.075 (4) (a) 1. a. to c., 2. to 5. and (b) are amended to read:

NR 439.075 (4) (a) 1. a. The ~~direct~~-stationary source associated with the ~~emission point~~-emissions unit subject to the testing requirement will be ceasing operation within one year of a scheduled test.

b. The most recently completed test results from a test conducted according to the methods and procedures specified ~~in~~-under 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% percent or less of the applicable emission limitation.

c. The ~~direct~~-stationary source associated with the ~~emission point~~-emissions unit 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~~-emissions unit equipped with a continuous emission monitor for the air contaminants requiring testing if the monitor meets the performance specification requirements ~~of~~-under s. NR 439.09.

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

4. The department may grant an extension of up to 180 calendar days for compliance emission testing if the owner or operator of a ~~direct~~-stationary source requests an extension, in writing, and can demonstrate that a representative emissions test cannot be performed within the time frames specified ~~in~~ under sub. (3) (b). The department may grant an extension greater than 180 calendar days for an emissions unit not operating.

5. No periodic compliance emission testing for sulfur dioxide emissions is required under this section for any affected ~~emission point~~ which emissions unit that performs periodic fuel sampling and analysis under s. NR 439.085, according to s. NR 439.08.

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

SECTION 68. NR 439.075 (4) (c) and (d) are created to read:

NR 439.075 (4) (c) All requests for extensions under par. (a) 4. shall be submitted in writing for department review and approval prior to the required test date.

(d) In evaluating waiver and extension requests, the department shall respond to the owner or operator within 14 calendar days of receipt of the request.

SECTION 69. NR 439.08 (1) (a) to (g) are amended to read:

NR 439.08 (1) (a) *Coal sampling.* Coal sampling shall be performed according to ASTM ~~D2234-02~~D2234/D2234M-20, Standard Practice for Collection of a Gross Sample of Coal, incorporated by reference ~~in~~under s. NR 484.10 (33).

(b) *Preparing coal for analysis.* Preparation of a coal sample for analysis shall be performed according to ASTM ~~D2013-04~~D2013/D2013M-21, Standard Method of Preparing Coal Samples for Analysis, incorporated by reference ~~in~~under s. NR 484.10 (30).

(c) *Sulfur content in coal.* The sulfur content of a coal sample shall be determined according to ASTM ~~D3177-02~~, Standard Test Methods for Total Sulfur in the Analysis Sample of Coal and Coke, or ASTM ~~D4239-04a~~D4239-18e1, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, ~~both~~ incorporated by reference ~~in~~under s. NR 484.10 ~~(45) and~~ (53).

(d) *Heat content in coal.* The heat content of a coal sample shall be determined according to ASTM ~~D5865-04~~D5865/D5865M-19, Standard Test Method for Gross Calorific Value of Coal and Coke, incorporated by reference ~~in~~under s. NR 484.10 (55g).

(e) *Ash content in coal.* The ash content of a coal sample shall be determined according to ASTM ~~D3174-04~~D3174-12 (2018)e1, Standard Test Method for Ash in the Analysis Sample of Coal and Coke from Coal, incorporated by reference ~~in~~under s. NR 484.10 (43).

(f) *Moisture content in coal.* The moisture content of a coal sample shall be determined according to ASTM ~~D3173-02~~D3173-17a, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, ~~incorporated by reference in~~under s. NR 484.10 (42), or ASTM D3302/D3302M-22a, Standard Test Method for Total Moisture in Coal, incorporated by reference under s. NR 484.10 (42) and (47g).

(g) *Ultimate analysis of coal.* The ultimate analysis of a coal sample shall be determined according to ASTM ~~D3176-89~~D3176-24, Standard Practice for Ultimate Analysis of Coal and Coke, incorporated by reference ~~in~~under s. NR 484.10 (44).

SECTION 70. NR 439.08 (1) (h) is repealed.

SECTION 71. NR 439.08 (2) (a) to (c) are amended to read:

NR 439.08 (2) (a) *Liquid fossil fuel sampling.* Liquid fossil fuel sampling shall be performed according to ASTM ~~D4057-95~~ D4057-22, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, or ASTM ~~D4177-95~~ D4177-22e1, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, incorporated by reference ~~in~~ under s. NR 484.10 (51) and (52).

(b) *Sulfur content in liquid fossil fuel.* The sulfur content of a liquid fossil fuel sample shall be determined according to ASTM ~~D129-00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)~~, ASTM ~~D1552-03~~ D1552-23, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), or ASTM ~~D4294-03~~ D4294-21, Standard Test Method for Sulfur in Petroleum Products by Energy-Dispersive X-ray Fluorescence Spectroscopy, incorporated by reference ~~in~~ under s. NR 484.10 (3), (25), and (54).

(c) *Heat content in liquid fossil fuel.* The heat content of a liquid fossil fuel sample shall be determined according to ASTM ~~D240-02~~ D240-19, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by a Bomb Calorimeter, or ASTM D4809-18, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), incorporated by reference ~~in~~ under s. NR 484.10 (4) and (55).

SECTION 72. NR 439.085 (2) (a) 1. and 2. (intro.), (b) 1. and 2. (intro.), (c) 1. and 2. (intro.), (d) (intro.), (3) (a) 2. (intro.) and (b) (intro.) are amended to read:

NR 439.085 (2) (a) 1. Perform coal sampling, using the procedures in ASTM ~~D2234/D2234M-03e1~~ D2234/D2234M-20, incorporated by reference ~~in~~ under s. NR 484.10 (33), that results in data at least as reliable as classification I-B-1, defined in ASTM ~~D2234/D2234M-03e1~~ D2234/D2234M-20 as automatic sampling — full stream cut — systematic spacing, and analyze these samples for ash content, sulfur content and heat content according to the applicable methods and procedures ~~in~~ under s. NR 439.08 (1).

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

(b) 1. Perform coal sampling using the procedures in ASTM ~~D2234/D2234M-03e1~~ D2234/D2234M-20, incorporated by reference ~~in~~ under s. NR 484.10 (33), that results in data at least as reliable as classification I-C-2, defined in ASTM ~~D2234/D2234M-03e1~~ D2234/D2234M-20 as automatic

sampling — part stream cut — random spacing, and analyze these samples for ash content, sulfur content and heat content according to the applicable methods and procedures ~~in~~under s. NR 439.08 (1).

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

(c) 1. Perform coal sampling using the procedures in ASTM ~~D2234/D2234M-03e1~~ D2234/D2234M-20, incorporated by reference ~~in~~under s. NR 484.10 (33), that results in data at least as reliable as classification II-D-2, defined in ASTM ~~D2234/D2234M-03e1~~ D2234/D2234M-20 as manual sampling — stationary coal sampling — random spacing, and analyze these samples for ash content, sulfur content, and heat content according to the applicable methods and procedures ~~in~~under s. NR 439.08 (1).

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

(d) The owner or operator of a coal burning installation ~~which~~that has a coal burning rate equal to or greater than 1,000 tons per year but less than 10,000 tons per year shall submit, on a quarterly basis, information on coal quality ~~which~~that is calculated from the supplier's analyses for each shipment of coal received at the installation. Each quarterly report is due within 30 calendar days following the end of the calendar quarter. The owner or operator shall obtain certification from the supplier that the applicable methods and procedures ~~in~~under s. NR 439.08 (1) were followed by the supplier. The report shall include all of the following information for each calendar quarter:

(3) (a) 2. Submit quarterly reports within 30 calendar days following the end of each calendar quarter that include all of the following information for each month during the calendar quarter:

(b) The owner or operator of a residual fuel oil burning installation ~~which~~that has a residual fuel oil burning rate equal to or greater than 150,000 gallons per year but less than 1.5 million gallons per year shall submit, on a quarterly basis, information on residual fuel oil quality which is calculated from the supplier's analyses for each shipment of residual fuel oil received at the installation. Each quarterly report is due within 30 calendar days following the end of the calendar quarter. The owner or operator of the installation shall obtain certification from the supplier that the applicable methods and procedures ~~in~~under s. NR 439.08 (2) were followed by the supplier. The report shall include all of the following information for each calendar quarter:

SECTION 73. NR 439.09 (1) to (4), (7) and (7m) are amended to read:

NR 439.09 (1) Continuous emissions monitoring systems for measuring opacity shall comply with all of the provisions and requirements in Performance Specification 1 in 40 CFR part 60, ~~Appendix~~ Appendices B and F, incorporated by reference ~~in~~under s. NR 484.04 (21) and (21m).

(2) Continuous emissions monitoring systems for measuring sulfur dioxide or nitrogen oxides shall comply with all the provisions and requirements in Performance Specification 2 in 40 CFR part 60, ~~Appendix~~ Appendices B and F or, for affected units, the performance specifications in 40 CFR part 75, Appendices A to I, incorporated by reference ~~in~~under s. NR 484.04 (21), (21m), and (27).

(3) Continuous emissions monitoring systems for measuring oxygen or carbon dioxide shall comply with all the provisions and requirements in Performance Specification 3 in 40 CFR part 60, ~~Appendix~~ Appendices B and F or, for affected units, the performance specifications in 40 CFR part 75, Appendices A to I, incorporated by reference ~~in~~under s. NR 484.04 (21), (21m), and (27).

(4) Continuous emissions monitoring systems for measuring carbon monoxide shall comply with all the provisions and requirements in Performance Specification 4, 4A, or 4B in 40 CFR part 60, ~~Appendix~~ Appendices B and F, incorporated by reference ~~in~~under s. NR 484.04 (21) and (21m).

(7) Continuous emissions monitoring systems for measuring hydrogen sulfide shall comply with all the provisions and requirements in Performance Specification 7 in 40 CFR part 60, ~~Appendix~~ Appendices B and F, incorporated by reference ~~in~~under s. NR 484.04 (21) and (21m).

(7m) Continuous emissions monitoring systems for measuring VOCs or total hydrocarbons shall comply with all the provisions and requirements in ~~the department's approval issued under s. NR 439.095~~ (+)Performance Specification 8 or 8A in 40 CFR part 60, Appendices B and F, incorporated by reference under s. NR 484.04 (21) and (21m).

SECTION 74. NR 439.09 (7p), (7r), (7t) and (7v) are created to read:

NR 439.09 (7p) Continuous emissions monitoring systems for measuring filterable particulate matter shall comply with all the provisions and requirements in Performance Specification 11 in 40 CFR part 60, Appendices B and F, incorporated by reference under s. NR 484.04 (21) and (21m).

(7r) Continuous emissions monitoring systems for measuring mercury shall comply with all the provisions and requirements in Performance Specifications 12 and 12A in 40 CFR part 60, Appendices B and F, incorporated by reference under s. NR 484.04 (21) and (21m).

(7t) Continuous monitoring systems for predictive emissions monitoring shall comply with all the provisions and requirements in Performance Specification 16 in 40 CFR part 60, Appendix B, incorporated by reference under s. NR 484.04 (21).

(7v) Continuous emissions monitoring systems for measuring hydrogen chloride shall comply with all the provisions and requirements in Performance Specification 18 in 40 CFR part 60, Appendices B and F, incorporated by reference under s. NR 484.04 (21) and (21m).

SECTION 75. NR 439.09 (9) (a) and (b) are amended to read:

NR 439.09 (9) (a) Opacity monitors shall complete at least one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(b) ~~Sulfur~~ Monitors for sulfur dioxide, nitrogen oxides, oxygen, carbon dioxide, carbon monoxide, hydrogen sulfide, total reduced sulfur, filterable particulate matter, mercury as measured by an analyzer, hydrogen chloride, predictive emission monitoring system, and VOC monitors VOCs shall complete at least one cycle of sampling, analyzing, and data recording for each successive 15-minute period. The values recorded shall be averaged hourly. Hourly averages shall be computed from at least 4 data points equally spaced over each 1-hour one-hour period, except during periods when calibration, quality assurance, or maintenance activities are being performed. During these periods, a valid hour shall consist of at least 2 data points separated by a minimum of 15 minutes, with one valid data point in each of the 15-minute quadrants of the hour.

SECTION 76. NR 439.09 (10) (intro.) is renumbered NR 439.09 (10) (ag) (intro.) and as renumbered is amended to read:

(10) (ag) The owner, ~~or operator, or designee~~ of a continuous emissions monitoring system shall submit quarterly summary excess emission reports to the department within 30 calendar days following the end of each calendar quarter ~~in accordance with pars. (a) to (d).~~ The ~~owner or operator shall submit either a full excess emission report under par. (a) or a summary excess emission report under par. (d), as specified in writing by the department,~~ shall include all of the following:

SECTION 77. NR 439.09 (10) (ag) 1. to 14. are created to read:

- NR 439.09 (10) (ag) 1. Pollutant monitored.
2. Stack and process.
3. Pollutant emission limitation.
4. Reporting period date range.
5. Total source operating time in reporting period.
6. Facility name and address.
7. Monitor manufacturer and model number.
8. Dates of latest monitor audit and certification.
9. Type of monitor audit and applicable results.
10. Duration of excess emissions by category: startup/shutdown, sootblowing, fuel problems, process malfunction, control equipment malfunction, other known causes, unknown causes, and sum of excess emissions.
11. Duration of monitor downtime by category including monitor equipment malfunction, non-monitor equipment malfunction, quality assurance/quality control calibration, other known causes, unknown causes, and sum of monitor downtime.
12. The percent of operating time with excess emissions or monitor downtime calculated as the sum of excess emissions or monitor downtime divided by the total source operating time in the reporting period, multiplied by 100.
13. A statement indicating that the information in the report is true, accurate, and complete.
14. The owner or operator's name, title, and signature, and the date.

SECTION 78. NR 439.09 (10) (a) (intro.) is renumbered NR 439.09 (10) (ar) (intro.) and as renumbered is amended to read:

NR 439.09 (10) (ar) If the total duration of excess emissions is 1 percent or greater or the total continuous emission monitoring system downtime is 5 percent or greater for the reporting period specified under par. (ag), then the owner, operator, or designee of a continuous emissions monitoring system shall submit both the summary excess emission report required under par. (ag) and a full excess emission report to the department within 30 calendar days following the end of each calendar quarter. The full excess emission reports-report required under this subsection-paragraph shall contain all of the following information:

SECTION 79. NR 439.09 (10) (a) 1. to 5. are renumbered NR 439.09 (10) (ar) 1. to 5.

SECTION 80. NR 439.09 (10) (b) (intro.) is amended to read:

(b) Unless otherwise specified by the department or an applicable standard, in the reports required under this subsection, periods of excess emissions shall be reported as follows:

SECTION 81. NR 439.09 (10) (b) 2. to 5. are repealed.

SECTION 82. NR 439.09 (10) (b) 6. is created to read:

NR 439.09 (10) (b) 6. For all other air pollutants, any one-hour period during which the average emissions exceed the applicable emission limitation.

SECTION 83. NR 439.09 (10) (d) is repealed.

SECTION 84. NR 439.095 (1) (intro.) and (g), (2), and (6) are amended to read:

NR 439.095 (1) APPLICABILITY AND GENERAL REQUIREMENTS. Except as provided ~~in~~under sub. (2), the owner or operator of a ~~direct~~-stationary source listed in this subsection shall install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring the pollutants specified in this subsection for the applicable source. The type of monitoring equipment used and the manner and location of its installation are subject to prior department approval. The sources and their respective monitoring requirements are as follows:

(g) ~~Direct-stationary~~-Stationary sources, required under an enforcement agreement or which have elected to use continuous emission monitoring to determine compliance with applicable rules, shall monitor for the parameters and pollutants for which they have installed the monitoring device. Those

parameters may include stack flow rate, opacity, or emissions of nitrogen oxides, sulfur dioxide, total reduced sulfur, carbon dioxide, VOCs, and hazardous air contaminants.

(2) EXEMPTIONS. The department may grant an exemption from any monitoring requirement ~~of~~ under this section for any source ~~which that~~ is subject to a continuous emission monitoring requirement ~~under a new source performance standard in ch. NR 440~~ another applicable standard or requirement.

(6) PERFORMANCE SPECIFICATIONS. The owner or operator of monitoring equipment installed to comply with this section shall install, calibrate, maintain, and operate the continuous emission monitor in accordance with the performance specifications ~~in under~~ 40 CFR part 60, ~~Appendix~~ Appendices B and F or, for affected units, the performance specifications ~~in under~~ 40 CFR part 75, Appendices A to I, incorporated by reference ~~in under~~ s. NR 484.04 (21), ~~(21m)~~, and (27), and the requirements ~~in under~~ s. NR 439.09. The owner or operator of the source shall submit a quality control and quality assurance plan for approval by the department within 60 calendar days of certification and within 30 calendar days of any revision to the plan. The monitor shall follow the plan, as approved by the department.

SECTION 85. NR 439.096 (2) (intro.), (3) (intro.), (4), (7) (intro.) and (9) (intro.) are amended to read:

NR 439.096 (2) COMBUSTION OPTIMIZATION NOTIFICATION AND PLAN SUBMITTAL. The owner or operator shall notify the department ~~shall be notified~~ in writing at least 45 calendar days in advance of a combustion optimization to provide the department an opportunity to evaluate the plan and to have a representative present to witness the combustion optimization procedures. The notice shall provide a combustion optimization plan ~~which that~~ includes, ~~but need not be limited to,~~ all of the following information:

(3) COMBUSTION OPTIMIZATION PLAN EVALUATION. In evaluating the combustion optimization plan, the department shall respond to the source owner or operator within ~~15 business~~ 21 calendar days of receipt of the plan and may require one or more of the following activities:

(4) NOTIFICATION OF COMBUSTION OPTIMIZATION PLAN REVISION. The source owner or operator shall notify the department of any modifications to a combustion optimization plan at least ~~5 business~~ 7 calendar days prior to the combustion optimization. In the event the owner or operator is unable to conduct the combustion optimization on the date specified in the plan, due to unforeseeable circumstances beyond the owner or operator's control, the owner or operator shall notify the department at least 5

~~business-7~~ calendar days prior to the scheduled combustion optimization date and specify the date when the combustion optimization is to be rescheduled.

(7) COMBUSTION OPTIMIZATION EQUIPMENT CALIBRATION REQUIREMENTS. The components of any emission sampling train or associated sampling equipment listed ~~in~~ under this subsection shall be calibrated not more than 60 calendar days before the test. This includes all of the following:

(9) COMBUSTION OPTIMIZATION REPORTING REQUIREMENTS. The owner or operator of a source that conducts a combustion optimization shall submit a copy of the report of the combustion optimization to the department within 60 calendar days after its completion. If requested, the department may grant an extension of up to 30 days for combustion optimization report submittal. The failure to include the following information in a combustion optimization report may result in rejection of the combustion optimization. The combustion optimization report shall include, ~~but need not be limited to,~~ all of the following information:

SECTION 86. NR 439.098 (1) (intro.), (a), and (b) and (2) (intro.) are amended to read:

NR 439.098 (1) The owner or operator of an acid rain affected unit subject to the requirements of under s. NR 409.065 may use one or more of the following tests as a basis for the report required by under s. NR 409.065 (6) (e) 7-:

(a) An ultimate analysis of coal conducted according to ASTM ~~D 3176-89~~ D3176-15, incorporated by reference ~~in~~ under s. NR 484.10 (44).

(b) A proximate analysis of coal conducted according to ASTM ~~D 3172-89~~ D3172-13(2021)e1, incorporated by reference ~~in~~ under s. NR 484.10 (41m).

(2) The owner or operator of an acid rain affected unit subject to the requirements of ~~under~~ s. NR 409.065 may measure and record the actual NO_x emission rate in accordance with the requirements of under s. NR 409.065 while varying any of the following parameters ~~where~~ when possible to determine their effects on the emissions of NO_x from the affected boiler:

SECTION 87. NR 439.11 is repealed and recreated to read:

NR 439.11 Malfunction prevention and abatement plans. (1) MALFUNCTION PREVENTION AND ABATEMENT PLAN APPLICABILITY. A malfunction prevention and abatement plan is a plan to prevent, detect, and correct malfunctions or equipment failures that may cause any applicable emission

limitation to be violated or may cause air pollution. The owner or operator of an air contaminant source that is required to have an air pollution control permit shall prepare and follow a malfunction prevention and abatement plan for each emissions unit, operation, or activity that meets any of the following criteria:

(a) Has the potential to emit hazardous air pollutants listed under section 112 (b) of the Act (42 USC 7412) or hazardous air contaminants under ch. NR 445 for which emission limits have been established by an air pollution control permit.

(b) Emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been established by an air pollution control permit.

(1g) MALFUNCTION PREVENTION AND ABATEMENT PLAN EXCLUSIONS. The owner or operator of a facility may exclude any of the following emissions units, operations, or activities from the malfunction prevention and abatement plan:

(a) Any emissions unit, operation, or activity that meets the criteria under s. NR 407.05 (4) (c) 9. a. If the department determines that an emission unit, operation, or activity does not meet the criteria under s. NR 407.05 (4) (c) 9. a., the owner or operator shall include the emissions unit, operation, or activity in the plan.

(b) Maintenance of grounds, equipment, and buildings, including lawn care, pest control, grinding, cutting, welding, painting, woodworking, general repairs, and cleaning, but not including use of organic compounds as clean-up solvents.

(c) Internal combustion engines used for warehousing and material transport, forklifts and courier vehicles, front end loaders, graders and trucks, carts, and maintenance trucks.

(d) Janitorial activities.

(e) Office activities.

(f) Convenience water heating.

(g) Convenience space heating units with heat input capacity of less than 5 million Btu per hour that burn gaseous fuels, liquid fuels, or wood.

(h) Fuel oil storage tanks with a capacity of 10,000 gallons or less.

- (i) Stockpiled contaminated soils.
- (j) Demineralization and oxygen scavenging of water for boilers.
- (k) Purging of natural gas lines.

(1r) PLAN CONTENT. The plan shall be in writing and may reference other materials or instructions to meet the plan content requirements. The plan shall include all of the following for each emissions unit, operation, or activity identified under sub. (1):

(a) The maximum intervals for inspection, routine maintenance, and calibration, replacement, or validation of the source, air pollution control equipment, and monitoring equipment.

(b) The maximum interval for inspection, routine maintenance, and calibration, replacement, or validation may not exceed that recommended by the manufacturer unless otherwise specified in a plan prepared under this section. In the event that there is not a maximum interval recommended by the manufacturer, the time between inspection, routine maintenance and calibration, replacement, or validation may not exceed one year.

(c) A description of the items or conditions that will be checked during inspection, routine maintenance, and calibration, replacement, or validation.

(d) A description of the corrective ~~procedures~~ actions that will be taken in the event of a malfunction or failure that results in the exceedance of the applicable emission limitation. These corrective ~~procedures~~ actions shall achieve and maintain compliance with the applicable emission limitations as expeditiously as possible and may not take longer than the time necessary to discontinue operation of the source consistent with safe operating procedures and practices for minimizing emissions.

(e) A description of the activities for routine maintenance, inspection and calibration, replacement, or validation of instrumentation installed and operated to monitor the operation of air pollution control equipment as required under s. NR 439.055 (1m).

(f) Other pertinent information to prevent, detect, and correct malfunctions or equipment failures.

(2) PLAN SUBMITTAL. The department may require any owner or operator of an air contaminant source to submit the plan required under sub. (1) for review and approval. The department may require a source to amend the plan if deemed necessary for malfunction prevention or the reduction of excess

emissions during malfunctions.

(3) PLAN IMPLEMENTATION. (a) No owner or operator may fail to carry out a plan required under this section.

(b) The owner or operator shall keep records necessary to demonstrate that the plan required under sub. (1) is implemented.

(4) RECORDS. The owner or operator shall maintain all of the following:

(a) A copy of the current plan.

(b) Copies of any previous versions of the plan, which shall be retained for 5 years.

(c) Copies of any materials and instructions referenced within the plan for the life of the emission unit, operation, or activity.

(d) Copies of all records required under this section, which shall be retained for a period of 5 years or for another period as may be specified by the department, whichever time is greatest.

(5) PLAN REVIEW AND UPDATES. The owner or operator shall review the plan required under sub. (1) at least every 5 years and shall update the plan within 60 calendar days when any of the following occur:

(a) Changes to operating procedures to prevent, detect, and correct malfunctions or equipment failures are made.

(b) Changes to air pollution control equipment.

(c) Changes to monitoring equipment.

(d) Operation of new equipment not meeting exclusions in sub. (1g) is commenced.

SECTION 88. NR 462 Table 6 1. a., c. and e., 2. a., c. and e., and 3. a., c. and e. are amended to read:

**Table 6
Fuel Analysis Requirements**

To conduct a fuel analysis for the following pollutant...	You shall...	Using... ^a
1. Mercury	a. Collect fuel samples	Procedure in s. NR 462.05 (4) (c) or ASTM D2234/D2234M-03e1 <u>D2234/D2234M-20</u> (for coal), or ASTM D6323-98 (2003) (for biomass) or equivalent.
	c. Prepare composited fuel samples	SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-04 <u>D2013/D2013M-21</u> (for coal), or ASTM D5198-92 (2003) (for biomass) or equivalent.
	e. Determine moisture content of the fuel type	ASTM D3173-02 <u>D3173/D3173M-17a</u> , or ASTM E871-82 (1998) or equivalent.
2. Total selected metals	a. Collect fuel samples	Procedure in s. NR 462.05 (4) (c) or ASTM D2234/D2234M-03e1 <u>D2234/D2234M-20</u> (for coal), or ASTM D6323-98 (2003) (for biomass) or equivalent.
	c. Prepare composited fuel samples	SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-04 <u>D2013/D2013M-21</u> (for coal), or ASTM D5198-92 (2003) (for biomass) or equivalent.
	e. Determine moisture content of the fuel type	ASTM D3173-02 <u>D3173/D3173M-17a</u> or ASTM E871-82 (1998) or equivalent.
3. Hydrogen chloride	a. Collect fuel samples	Procedure in s. NR 462.05 (4) (c) or ASTM D2234/D2234M-03e1 <u>D2234/D2234M-20</u> (for coal) or ASTM D6323-98 (2003) (for biomass) or equivalent.
	c. Prepare composited fuel samples	SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-04 <u>D2013/D2013M-21</u> (for coal) or ASTM D5198-92 (2003) (for biomass) or equivalent.
	e. Determine moisture content of the fuel type	ASTM D3173-02 <u>D3173/D3173M-17a</u> or ASTM E871-82 (1998) or equivalent.

SECTION 89. NR 484.04 Table 2 (9e), (9m), (9s), (14m), (20c), and (20v) are created to read:

Table 2
CFR Appendix References

CFR Appendix Referenced	Title	Incorporated by Reference For
(9e) 40 CFR part 51 Appendix M, Method 201	Determination of PM ₁₀ Emissions	NR 439.06 (1m)
(9m) 40 CFR part 51 Appendix M, Method 201A	Determination of PM ₁₀ and PM _{2.5} Emissions from Stationary Sources	NR 439.06 (1m)
(9s) 40 CFR part 51 Appendix M, Method 202	Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	NR 439.06 (1) NR 439.06 (1m)
(14m) 40 CFR part 60 Appendix A, Method 3C	Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources	NR 439.07 (8) (a) 1. NR 439.07 (8) (b) 5.
(20c) 40 CFR part 60 Appendix A, Method 29	Determination of Metals from Stationary Sources	NR 439.06 (5)
(20v) 40 CFR part 60 Appendix A, Method 320	Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy	NR 439.06 (2) (a) NR 439.06 (3) (a) NR 439.06 (6) (a) NR 439.07 (8) (e)

SECTION 90. NR 484.04 Table 2 (21m) is amended to read:

Table 2
CFR Appendix References

(21m) 40 CFR part 60 Appendix F	Quality Assurance Procedures	NR 428.23 (1) (b) 2. c. <u>NR 439.06 (2) (b)</u> <u>NR 439.06(4)(b)</u> <u>NR 439.06(6)(b)</u> <u>NR 439.06(7)(b)</u> <u>NR 439.06 (9) (a) 2.</u> <u>NR 439.07(8)(b)4.</u> <u>NR. 439.09(1)-(4), (7)-(7r), (7v)</u> <u>NR 439.095 (6)</u> NR 466.10 (2) NR 466.24 (2) (d) 1. b.
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SECTION 91. NR 484.10 Table 5 (3), (4), (25), (26), (30), (33), and (41m) to (44) are amended to read [Note to LRB: please delete the duplicate row (33) in Table 5]:

**Table 5
ASTM Standard References**

	Standard Number	Standard Title	Incorporated by Reference For
(3)	ASTM D129-00 (2005)	Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)	40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendices A and D NR 439.08 (2) (b)
(4)	ASTM D240-02 <u>D240-19</u>	Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter	40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendices A, D, E, and F NR 400.02 (79) NR 439.08 (2) (c)
(25)	ASTM D1552-03 <u>D1552-23</u>	Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)	40 CFR part 75 Appendices A and D NR 439.08 (2) (b)
(26)	ASTM D1826-94 (1998) <u>(2017)</u>	Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter	40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendices E and F NR 400.02 (79)
(30)	ASTM D2013-04 <u>D2013/D2013M-21</u>	Standard Method of Preparing Coal Samples for Analysis	40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendix F NR 439.08 (1) (b) NR 462, Table 6
(33)	ASTM D2234/D2234M-03e1 <u>D2234/D2234M-20</u>	Standard Practice for Collection of a Gross Sample of Coal	40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendix F NR 439.08 (1) (a) NR 439.085 (2) (a) 1. NR 439.085 (2) (b) 1. NR 439.085 (2) (c) 1. NR 462, Table 6
(41m)	ASTM D3172-89 (2002) <u>D3172-13(2021)e1</u>	Standard Practice for Proximate Analysis of Coal and Coke	NR 439.098 (1) (b)
(42)	ASTM D3173-02 <u>D3173/D3173M-17a</u>	Standard Test Method for Moisture in the Analysis Sample of Coal and Coke	40 CFR part 60 Appendix A, Method 19 NR 439.08 (1) (f) NR 462, Table 6
(43)	ASTM D3174-04 <u>D3174-12(2018)e1</u>	Standard Test Method for Ash in the Analysis Sample of Coal and Coke from Coal	40 CFR part 75 Appendix G NR 439.08 (1) (e)

- (44) ASTM ~~D3176-89~~ Standard Practice for Ultimate Analysis of Coal and 40 CFR part 75 Appendices A and F
~~(2002)D3176-24~~ Coke NR 439.08 (1) (g)
 NR 439.098 (1) (a)

SECTION 92. NR 484.10 Table 5 (45) is repealed.

SECTION 93. NR 484.10 Table 5 (47g) is created to read:

Table 5
ASTM Standard References

Standard Number	Standard Title	Incorporated by Reference For
(47g) ASTM D3302/D3302M-22a	Standard Test Method for Total Moisture in Coal	NR 439.08 (1) (f)

SECTION 94. NR 484.10 Table 5 (51) to (55) and (55g) are amended to read:

Table 5
ASTM Standard References

Standard Number	Standard Title	Incorporated by Reference For
(51) ASTM D4057-95 (2000)D4057-22	Standard Practice for Manual Sampling of Petroleum and Petroleum Products	40 CFR part 75 Appendix D NR 439.08 (2) (a)
(52) ASTM D4177-95 (2000)D4177-22e1	Standard Practice for Automatic Sampling of Petroleum and Petroleum Products	40 CFR part 75 Appendix D NR 439.08 (2) (a)
(53) ASTM D4239-04a <u>D4239-18e1</u>	Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods	40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendix A NR 439.08 (1) (c)
(54) ASTM D4294-03 <u>D4294-21</u>	Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry	40 CFR part 75 Appendices A and D NR 439.08 (2) (b)
(55) ASTM D4809-00 <u>D4809-18</u>	Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method)	40 CFR part 75 Appendices D, E and F <u>NR 439.08 (2) (c)</u> <u>NR 460.10 (2) (f) 2.</u>
(55g) ASTM D5865- 04 <u>D5865/D5865M-19</u>	Standard Test Method for Gross Calorific Value of Coal and Coke	NR 400.02 (79) NR 439.08 (1) (d)

SECTION 95. NR 484.10 Table 5 (55r) is created to read:

**Table 5
ASTM Standard References**

Standard Number	Standard Title	Incorporated by Reference For
(55r) ASTM D6348-12 (2020)	Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy	NR 439.06 (2) (a) NR 439.06 (3) (a) NR 439.06 (6) (a) NR 439.07 (8) (e)

SECTION 96. EFFECTIVE DATE. This rule takes effect on the first day of the month following publication in the Wisconsin Administrative Register as provided in s. 227.22 (2) (intro.), Stats.

SECTION 97. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on August 14, 2024.

Dated at Madison, Wisconsin _____.

STATE OF WISCONSIN

DEPARTMENT OF NATURAL RESOURCES

BY _____

Steven Little, Deputy Secretary