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☞ Details: Emergency Rule by Department of Natural Resources.

(FORM UPDATED: 08/11/2010)

WISCONSIN STATE LEGISLATURE ...
PUBLIC HEARING - COMMITTEE RECORDS

2007-08
(session year)

Joint
(Assembly, Senate or Joint)

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COMMITTEE NOTICES ...

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INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
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  (**ab** = Assembly Bill) (**ar** = Assembly Resolution) (**ajr** = Assembly Joint Resolution)
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- Miscellaneous ... **Misc**

* Contents organized for archiving by: Stefanie Rose (LRB) (August 2012)

State of Wisconsin
Department of Natural Resources

NOTICE TO PRESIDING OFFICERS

OF PROPOSED RULEMAKING

Pursuant to s. 227.19, Stats., notice is hereby given that final draft rules are being submitted to the presiding officer of each house of the legislature. The rules being submitted are:

Board Order Number:	AM-38-03
Clearinghouse Number:	04-023
Subject of Rules:	National emission standards for hazardous air pollutants (NESHAP) for facilities engaged in the secondary production of aluminum
Date of Transmittal:	August 27, 2008

Send a copy of any correspondence or notices pertaining to the rule to:

Carol Turner, Department Rules Coordinator
DNR Bureau of Legal Services
LS/8, 101 South Webster

Telephone: 266-1959
e-mail: Carol.Turner@Wisconsin.gov

An electronic copy of the proposed rule submittal may be obtained by contacting Ms. Turner

REPORT TO LEGISLATURE

NR 463, Wis. Adm. Code
National emission standards for hazardous air pollutants (NESHAP)
for facilities engaged in the secondary production of aluminum

Board Order No. AM-38-03
Clearinghouse Rule No. 04-023

Basis and Purpose of the Proposed Rule

Section 112 of the Clean Air Act, as amended in 1990, requires EPA to promulgate emission standards for all categories of major sources of hazardous air pollutants (HAP) and certain selected minor (area sources) of hazardous air pollutants. Major sources are defined as those having the potential to emit at least 10 tons per year of any single HAP or 25 tons per year of any combination of HAPs. EPA promulgated the secondary aluminum NESHAP, 40 CFR 63 Subpart RRR, on March 23, 2000 (65 FR 15690). Area sources such as salvage recovery (sweat) furnaces are included in the secondary aluminum regulation because they have the potential to emit dioxins/furans, pollutants listed in section 112(c)(6) of the Clean Air Act. The state rule would require a state operating permit for area sources because of the potential for these emissions. Consistent with the federal rule, the state rule would not require a federal Title V operating permit for area sources.

Section 285.27(2), Stats., requires the Department to promulgate by rule a standard similar to any federal standard promulgated under section 112 of the Clean Air Act. The state standard may not be more restrictive in terms of emission limitations than the federal standard.

The secondary aluminum processing industry prepares aluminum to be reused by shredding, drying and melting. Much of the aluminum that is processed has a variety of coatings and can contain a variety of contaminants including dirt and grease. During these processing operations, some of these coatings and contaminants are transformed and released into atmosphere as dioxins/furans, chlorines, metallic particulates, polycyclic organic matter (POM) and hydrochloric acid.

The secondary aluminum rule is aimed at controlling or preventing these emissions by either pollution prevention or pollution control techniques. Pollution prevention can be utilized by melting only clean scrap or in the choice of fluxing (cleaning) agents used during the melting of aluminum scrap. Pollution control can take many forms in this rule, including the use of afterburners and baghouses.

The proposed rule is identical to the NESHAP except for punctuation, capitalization, numbering and non-substantive wording and organizational changes made to accommodate state rule form and style requirements. The proposed rule would require a state operation permit for affected area sources consistent with requirements for other area sources (e.g. chromium electroplaters) in previously adopted federal rules. The substance of the proposed rule is identical to the rule already in effect at the federal level.

There are estimated to be about 14 affected sources in the state with roughly half of the affected sources located in the Southeast Region. Aluminum processing may occur intermittently at scrap or salvage yards as the price of aluminum fluctuates. Consequently, it is very difficult to maintain an accurate list of affected sources. The standard affects smaller "area sources" as well as major sources of hazardous air pollutants.

Summary of Public Comments

Two members of the public attended the hearing, but no comments were offered.

Modifications Made

No modifications were made as a result of comments at the hearing. EPA amended the secondary aluminum rule on December 19, 2005 (70 FR 75346) to exempt area sources from the requirement to obtain a Title V operating permit. EPA also revised the rule on September 3, 2004 (171 FR 53980) and October 3, 2005 (FR 70 57516) to correct some minor errors and on April 20, 2006 (71 FR 20461) to change the requirements regarding startup, shutdown and malfunction plans. These amendments have all been incorporated into the proposed state rule after the hearing was held. Area sources would be required to obtain a state operation permit instead of a Title V operation permit. Consistent with the federal rules, major sources would continue to be required to obtain a Title V operation permit.

Appearances at the Public Hearing

In support – none
In opposition – none

As interest may appear:

Michele Lemberger, ECCI, P.O. Box 11417, Green Bay, WI 54307-1417
Michael Carlson, 314 W. Doty Street, #302, Madison, WI 53703

Changes to Rule Analysis and Fiscal Estimate

The rule analysis was completely revised to comply with the current statutory requirements for what is to be included in the analysis. The fiscal estimate is unchanged.

Response to Legislative Council Rules Clearinghouse Report

The comments have been incorporated into the proposed rule, except where doing so would have created an inconsistency with the federal rule. For example, definitions were not created for terms not defined in the federal rule, and compliance dates remain consistent with federal requirements even though the dates may be in the past.

Final Regulatory Flexibility Analysis

The proposed rule will not have a significant economic impact on a substantial number of small businesses in Wisconsin. This is primarily because the proposed rule is identical to the existing federal rule, with which all affected sources are already required to comply. Costs to the affected sources are being incurred in response to the federal rule, which has been in effect since March 23, 2000. No additional costs will be incurred in response to the proposed state rule other than the cost for area sources to obtain a state operation permit.

Also note that the Department has no regulatory flexibility in this case and cannot make the proposed rule more stringent or less stringent than the existing federal rule. Even if the state rule was different from the federal rule, all sources would still be required to comply with the federal rule.

A. Identify and discuss why the rule includes or fails to include any of the following methods for reducing the impact on small business.

1. Less stringent compliance or reporting requirements.

The federal rule does not provide for less stringent compliance or reporting requirements for small sources, and, by statute, the department is prohibited from altering the federal requirements. It should be noted that a variety of compliance options are available within the rule for all sources.

2. Less stringent schedules or deadlines for compliance or reporting requirements.

   Schedules and deadlines for compliance and reporting are identical for all affected sources.

3. Consolidation or simplification of compliance or reporting requirements.

   Same answer as for A.1 above.

4. The establishment of performance standards in lieu of design or operational standards.

   The proposed rules establish emission standards and operating requirements for all sources. No performance standards are proposed.

5. The exemption from any or all requirements of the rule.

   The proposed rule exempts small sources from the requirement to obtain a federal or state operating permit.

B. Summarize the issues raised by small business during the rule hearings, any changes made in the proposed rule as a result of alternatives suggested by small business and the reasons for rejecting any alternatives suggested by small business.

   No issues were raised by small businesses at the public hearing or during the public comment period.

C. Identify and describe any reports required by the rule that must be submitted by small business and estimate the cost of their preparation.

   Excess Emissions and Summary Report - Documentation of ongoing compliance or non-compliance submitted every six months.

   Startup, Shutdown and Malfunction Plan and Reports – The owner or operator of an affected source must develop a startup, shutdown and malfunction plan and must report any action taken during a startup, shutdown or malfunction that is not consistent with the plan.

   Annual Compliance Certification – Each year, the owner of operator must certify continuing compliance with the emission standards, operating requirements and all monitoring, recordkeeping and reporting requirements of the proposed rule.

   Recordkeeping and reporting costs have not been estimated by EPA or the Department. These costs are all incurred while complying with the existing federal regulation. The proposed state regulation will not result in any additional costs to the affected sources beyond what they already pay to comply with the federal regulation.

D. Identify and describe any measures or investments that small business must take to comply with the rule and provide an estimate of the associated cost.

   EPA has estimated potential economic impacts on small businesses. For their analysis, EPA classified firms as small businesses if they had fewer than 750 employees. From its analysis, EPA determined that the secondary aluminum MACT rule would have minimal impact on most small businesses. And, as stated above, these costs are all incurred while complying with the existing federal regulation. The proposed state regulation will not result in any additional costs to the affected sources beyond what they already pay to comply with the federal regulation other than the cost for obtaining a state operation permit.

E. Identify the additional cost, if any, to the state in administering or enforcing a rule which includes any of the methods listed in A.

Some of the methods listed in A are already included in the proposed rule. Also, Wisconsin statutes require the Department to adopt the federal language as is and do not allow significant changes that would make the rules more or less stringent for any sources.

F. Describe the impact on public health, safety and welfare, if any, caused by including in the rule any of the methods listed in A.

Same answer as for E above.

ORDER OF THE STATE OF WISCONSIN
NATURAL RESOURCES BOARD
AMENDING AND CREATING RULES

The Wisconsin Natural Resources Board proposes an order to **amend** NR 460.02(intro.), 463.07(7)(a), 463.103(2)(a) and 484.11(2)(d); and to **create** NR 406.04(1)(zi), 407.04(7), 460 Appendix RRR, subch. II of ch. NR 463 and 484.05(10) and (12), relating to national emission standards for hazardous air pollutants for facilities engaged in the secondary production of aluminum.

AM-38-03

Analysis Prepared by the Department of Natural Resources

Statutes interpreted: s. 285.11(6), Stats.

Statutory authority: ss. 227.11(2)(a), 227.14(1m) and 285.11(1), Stats.

Explanation of agency authority: Section 285.27(2), Stats., requires that the Department promulgate National Emission Standards for Hazardous Air Pollutants (NESHAP) by rule. In addition, since this NESHAP affects more than ten facilities in Wisconsin, promulgation into state rule is consistent with the Maximum Achievable Control Technology (MACT) Streamlining Policy approved by the Natural Resources Board in 1996.

Related statute or rule: NESHAP regulations for other source categories are contained in chapters NR 460 to 469. Chapter NR 463 contains the NESHAP rules relating to metals treating and processing.

Plain language analysis: The US EPA promulgated the NESHAP for secondary aluminum production, 40 CFR 63 Subpart RRR, on March 23, 2000 (65 FR 15690). US EPA amended the NESHAP on December 19, 2005 (70 FR 75346) to exempt area sources from the requirement to obtain a Title V operating permit. US EPA also revised the rule on September 3, 2004 (171 FR 53980) and October 3, 2005 (FR 70 57516) to correct some minor errors and on April 20, 2006 (71 FR 20461) to change the requirements regarding startup, shutdown and malfunction plans. The NESHAP establishes maximum achievable control technology (MACT) requirements for this source category. The proposed rule will incorporate this NESHAP along with the revisions into the Wisconsin Administrative Code.

Sources effected are new and existing facilities that do secondary processing of aluminum. Both large (major) and small (area) sources are covered by these rules. Examples of the facilities covered by this rule are aluminum foundries and salvage recovery operations that reclaim aluminum. Compliance options include control equipment and pollution prevention methods for the substitution of non-toxic materials.

The order includes related changes in chs. NR 460, 463 subchapter I and 484. The consent of the Attorney General and the Revisor of Statutes will be requested for the incorporation by reference of new test methods in ch. NR 484.

Summary of, and comparison with, existing or proposed federal regulation: As noted above, the federal NESHAP for this source category is an existing federal regulation. While some changes to the federal rule language and organization were made to accommodate state administrative rule format and style, no substantive changes were made other than requiring a state operation permit for area sources. In most parts of the proposed rule, the federal format and language was retained as allowed under s. 227.14(1m)(a), Stats., and the proposed state rule is essentially identical to the federal rule.

Comparison with similar rules in adjacent states: The federal NESHAP regulation for this source category is in effect in every state in the nation, and all affected sources in any state are required to comply with the federal rule. The U.S. Environmental Protection Agency has delegated authority to most states to enforce the federal NESHAP regulations, which generally means that those states adopt the federal regulations as state regulations. Thus, the NESHAP regulations in adjacent states, if any, are identical to the federal regulations and the proposed Wisconsin rule.

Summary of factual data and analytical methodologies: Since the Department is merely adopting a federal regulation, the Department has not compiled any factual data nor used any analytical methodologies. Please see the federal documentation supporting the development and promulgation of the federal regulation at http://www.epa.gov/ttn/atw/alum2nd/alum2pg.html.

Analysis and supporting documentation used to determine any effect on small business or in preparation of an economic impact report: Cost estimates and economic impact analyses were prepared by the US Environmental Protection Agency when they promulgated this regulation. See http://www.epa.gov/ttn/atw/alum2nd/alum2pg.html.

Anticipated costs incurred by the private sector: Because the federal regulation is in effect and all affected sources must comply with it, no additional costs will be incurred by the private sector as a result of the promulgation of the state rule other than the cost to submit a state operation permit application.

Effect on small business: Because the federal regulation is in effect and all affected sources must comply with it, there will be no additional effect on small business as a result of the promulgation of the state rules other than the cost to submit a state operation permit application.

Agency contact person (including e-mail address and telephone number):
Roger Fritz - 608-266-1201, Roger.Fritz@wisconsin.gov.

SECTION 1. NR 406.04(1)(zi) is created to read:

NR 406.04(1)(zi) Secondary aluminum production facilities as defined by s. NR 463.12(36).

SECTION 2. NR 407.04(7) is created to read:

NR 407.04(7) SECONDARY ALUMINUM PROCESSING UNITS. Notwithstanding sub. (1), the owner or operator of any facility which has a secondary aluminum processing unit as defined in s. NR 463.12(35) that is not a major source and is not required to obtain a construction permit under ch. NR 406, shall submit an operation permit application for a non-part 70 source on application forms available from the department no later than one year after the effective date of this subsection...[LRB insert date].

SECTION 3. NR 460.02(intro.) is amended to read:

NR 460.02 Definitions. (intro.) For terms not defined in this section, the definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the definitions in this section apply to the terms used in this chapter and, for terms not defined in chs. NR 462 to 464 and 466 to 469 or the subchapters of ~~ch.~~ chs. NR 463 and 465, to the terms used in those chapters or subchapters as well. If this section defines a term which is also defined in ch. NR 400, the definition in this section applies in this chapter and in chs. NR 462 to 464 and 466 to 469 and the subchapters of ~~ch.~~ chs. NR 463 and 465 rather than the definition in ch. NR 400, except that when one of those chapters or subchapters has its own definition of the term, that definition applies in that chapter or subchapter.

SECTION 4. NR 460 Appendix RRR is created to read:

Chapter NR 460
Appendix RRR
General Provisions Applicable to Subchapter II of Chapter NR 463

The general provisions of this chapter listed under the column heading "Reference" apply to sources subject to ch. NR 463 subch. II only if a Yes appears in the same row under the column heading "Applies to Subchapter II of Chapter NR 463?". Certain provisions in other chapters which correspond to federal provisions in 40 CFR part 63 Subpart A are also included in the Reference column.

Reference	Requirement	Applies to Subchapter II of Chapter NR 463?	Comment
NR 2	Availability of Information and Confidentiality	Yes	
NR 406	Construction and Reconstruction – Applicability and Requirements	Yes	
NR 407.04(1)(b)3.		Yes	
NR 460.02	Definitions	Yes	Additional definitions in s. NR 463.12.
NR 460.03	Units and Abbreviations	Yes	
NR 460.04(1)(a) to (c)	Prohibited Activities	Yes	
NR 460.04(1)(d)		Yes	
NR 460.04(2)	Circumvention and Severability	Yes	
NR 460.05(1)	Compliance with Standards and Maintenance Applicability	Yes	
NR 460.05(2)(a) to (e)	New and Reconstructed Source – Dates	Yes	
NR 460.05(2)(f)		Yes	
NR 460.05(3)(a)	Existing source dates	Yes	Section NR 463.115 specifies dates

NR 460.05(3)(b)		Yes	
NR 460.05(3)(c)1. and 2.		Yes	
NR 460.05(4)(a) and (b)	Operation & Maintenance Requirements	Yes	Section NR 463.15 requires plan
NR 460.05(4)(c)	Startup, Shutdown and Malfunction Plan	Yes	
NR 460.05(5)	Compliance with Emission Standards	Yes	
NR 460.05(6)	Compliance with Opacity and Visual Emission Standards	Yes	
NR 460.05(7)	Extension of Compliance	Yes	
NR 460.06	Performance Test Requirements – Applicability and Dates	Yes	Except s. NR 463.16 establishes dates for initial performance tests, with repeat tests every 5 years for major sources
NR 460.06 (2)	Notification and Quality Assurance and Test Plan	Yes	
NR 460.06(3)	Testing facilities	Yes	
NR 460.06(4)	Conduct of Test	Yes	
NR 460.06(5)	Alternative Test Method	Yes	
NR 460.06(6)	Data Analysis	Yes	
NR 460.06(7)	Waiver of Tests	Yes	
NR 460.07(1)(a)	Monitoring Requirements – Applicability	Yes	
NR 460.07(1)(b)		Yes	
NR 460.07(1)(c)		Yes	
NR 460.07(2)	Conduct of Monitoring	Yes	
NR 460.07(3)(a) to (c)	CMS Operation and Maintenance	Yes	
NR 460.07(3)(d) to (h)		Yes	
NR 460.07(4)	Quality Control	Yes	
NR 460.07(5)	CMS Performance Evaluation		
NR 460.07(6)(a) to (d)	Alternative Monitoring Method	No	Section NR 463.15(23) includes provisions for monitoring alternatives
NR 460.07(6)(e)	Alternative to RATA Test	Yes	
NR 460.07(7)(a)	Data Reduction		
NR 460.07(7)(b)		No	Section NR 463.163 requires 5 6-minute averages for an aluminum scrap shredder
NR 460.07(7)(c) to (e)		Yes	
NR 460.08	Notification requirements	Yes	Except s. NR 463.17 establishes dates for notifications of compliance status reports
NR 460.09(1)	Recordkeeping and Reporting – Applicability	Yes	
NR 460.09(2)	General Requirements	Yes	Section NR 463.19 includes additional requirements
NR 460.09(3)(a)	Additional CMS Recordkeeping	Yes	

NR 460.09(4)	General Reporting Requirements,Performance Test Results,Opacity or Visual Emission Observations,Progress Reports, and Startup, Shutdown and Malfunction Reports	Yes	
NR 460.09(5)(a) and (b)	Additional CMS Reports	Yes	
NR 460.09(5)(c)	Excess Emissions, CMS Performance Reports	Yes	Reporting deadline given in s. NR 466.18
NR 460.09(5)(d)	COMS Data reports	Yes	
NR 460.09(6)	Recordkeeping and Reporting Waiver	Yes	
NR 460.10(1) and (2)	Control Device Requirements	No	Flares not applicable
NR 484	Incorporation by Reference	Yes	Chapters 3 and 5 of ACGIH Industrial Ventilation Manual for capture and collection systems, incorporated by reference in s. NR 484.11(2)(d); and Interim Procedures for Estimating Risk Associated with Exposure to Mixtures of Chlorinated Dibenzofurans (CDDs and CDFs) and 1989 Update, incorporated by reference in s. NR 484.05(12).

SECTION 5. NR 463.07(7)(a) is amended to read:

NR 463.07(7)(a) If the owner or operator of an affected source uses both a fume suppressant and add-on control device and both are needed to comply with the applicable emission limit, monitoring requirements as identified in subs. (1) to (6), and the work practice standards of Table 1 of this ~~chapter~~ subchapter, apply for each of the control techniques used.

SECTION 6. NR 463.103(2)(a) is amended to read:

NR 463.103(2)(a) Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of s. NR 463.05 and Table 1 of this ~~chapter~~ subchapter have taken place. The record may take the form of a checklist and shall identify the device inspected, the date of inspection, a brief

description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

SECTION 7. Subchapter II of ch. NR 463 to follow s. NR 463.106 is created to read:

Subchapter II

Secondary Aluminum Production

NR 463.11 Applicability. (1) The requirements of this subchapter apply to the owner or operator of each secondary aluminum production facility.

Note: This subchapter is based on the federal regulations contained in 40 CFR part 63 Subpart RRR, created March 23, 2000, as last revised on April 20, 2006.

(2) The requirements of this subchapter apply to the following affected sources, located at a secondary aluminum production facility that is a major source of hazardous air pollutants (HAPs) as defined in s. NR 460.02(22):

(a) Each new and existing aluminum scrap shredder.

(b) Each new and existing thermal chip dryer.

(c) Each new and existing scrap dryer, delacquering kiln and decoating kiln.

(d) Each new and existing group 2 furnace.

(e) Each new and existing sweat furnace.

(f) Each new and existing dross-only furnace.

(g) Each new and existing rotary dross cooler.

(h) Each new and existing secondary aluminum processing unit.

(3) The requirements of this subchapter pertaining to dioxin and furan emissions and associated operating, monitoring, reporting and recordkeeping requirements apply to the following affected sources, located at a secondary aluminum production facility that is an area source of HAPs as defined in s. NR 460.02(5):

(a) Each new and existing thermal chip dryer.

(b) Each new and existing scrap dryer, delacquering kiln and decoating kiln.

(c) Each new and existing sweat furnace.

(d) Each new and existing secondary aluminum processing unit, containing one or more group 1 furnace emission units processing other than clean charge.

(**4**) The requirements of this subchapter do not apply to facilities and equipment used for research and development that are not used to produce a salable product.

(**5**) An aluminum die casting facility, aluminum foundry or aluminum extrusion facility shall be considered to be an area source if it does not emit, or have the potential to emit, considering controls, 10 tons per year or more of any single listed HAP or 25 tons per year of any combination of listed HAP from all emission sources which are located in a contiguous area and under common control, without regard to whether or not the sources are regulated under this subchapter or any other subchapter. In the case of an aluminum die casting facility, aluminum foundry or aluminum extrusion facility which is an area source and is subject to regulation under this subchapter only because it operates a thermal chip dryer, no furnace operated by such a facility shall be deemed to be subject to the requirements of this subchapter if it melts only clean charge, internal scrap or customer returns.

NR 463.115 Dates. (1) The owner or operator of an existing affected source shall comply with the requirements of this subchapter by March 24, 2003.

(**2**) Except as provided in sub. (3), the owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999 shall comply with the requirements of this subchapter by March 24, 2000 or upon startup, whichever is later.

(**3**) The owner or operator of any affected source which is constructed or reconstructed at any existing aluminum die casting facility, aluminum foundry or aluminum extrusion facility which otherwise meets the applicability criteria in s. NR 463.11 shall comply with the requirements of this subchapter by March 24, 2003 or upon startup, whichever is later.

NR 463.12 Definitions. For terms not defined in this section, the definitions contained in chs. NR

400 and 460 apply to the terms in this subchapter, with definitions in ch. NR 460 taking priority over definitions in ch. NR 400. If this section defines a term which is also defined in ch. NR 400 or 460, the definition in this section applies in this subchapter. In this subchapter:

(1) "Add-on air pollution control device" means equipment installed on a process vent that reduces the quantity of a pollutant that is emitted to the air.

(2) "Afterburner" means an air pollution control device that uses controlled flame combustion to convert combustible materials to noncombustible gases; also known as an incinerator or a thermal oxidizer.

(3) "Aluminum scrap" means fragments of aluminum stock removed during manufacturing, manufactured aluminum articles or parts rejected or discarded and useful only as material for reprocessing, and waste and discarded material made of aluminum.

(4) "Aluminum scrap shredder" means a unit that crushes, grinds or breaks aluminum scrap into a more uniform size prior to processing or charging to a scrap dryer, delacquering kiln, decoating kiln or furnace. A bale breaker is not an aluminum scrap shredder.

(5) "Bag leak detection system" means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a baghouse in order to detect bag failures. A bag leak detection system may operate on triboelectric, light scattering, light transmittance or other effect to monitor relative particulate matter loadings.

(6) "Chips" means small, uniformly-sized, unpainted pieces of aluminum scrap, typically below 1¼ inches in any dimension, primarily generated by turning, milling, boring and machining of aluminum parts.

(7) "Clean charge" means furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings and lubricants; uncoated and unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered and decoated at 482 °C (900 °F) or higher, and runaround scrap.

(8) "Cover flux" means salt added to the surface of molten aluminum in a group 1 or group 2 furnace, without agitation of the molten aluminum, for the purpose of preventing oxidation.

(9) "Customer returns" means any aluminum product which is returned by a customer to the aluminum company that originally manufactured the product prior to resale of the product or further distribution in commerce, and which contains no paint or other solid coatings.

(10) "Dioxins and furans" or "D&F" means tetra-, penta-, hexa- and octachlorinated dibenzo dioxins and furans.

(11) "Dross" means the slags and skimmings from aluminum melting and refining operations consisting of fluxing agents, impurities or oxidized and non-oxidized aluminum, from scrap aluminum charged into the furnace.

(12) "Dross-only furnace" means a furnace, typically of rotary barrel design, dedicated to the reclamation of aluminum from dross formed during melting, holding, fluxing or alloying operations carried out in other process units. Dross and salt flux are the sole feedstocks to this type of furnace.

(13) "Emission unit" means a group 1 furnace or in-line fluxer at a secondary aluminum production facility.

(14) "Fabric filter" means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media; also known as a baghouse.

(15) "Feed or charge" means, for a furnace or other process unit that operates in batch mode, the total weight of material, including molten aluminum, T-bar, sow, ingot, other material and alloying agents that enter the furnace during an operating cycle. For a furnace or other process unit that operates continuously, feed or charge means the weight of material, including molten aluminum, T-bar, sow, ingot, other material and alloying agents that enter the process unit within a specified time period, such as a time period equal to the performance test period. The feed or charge for a dross-only furnace includes the total weight of dross and solid flux.

(16) "Fluxing" means refining of molten aluminum to improve product quality, achieve product specifications, or reduce material loss, including the addition of solvents to remove impurities and the injection of gases such as chlorine or chlorine mixtures to remove magnesium (demagging) or hydrogen bubbles (degassing). Fluxing may be performed in the furnace or outside the furnace by an in-line fluxer.

(17) "Furnace hearth" means the combustion zone of a furnace in which the molten metal is

contained.

(18) "Group 1 furnace" means a furnace of any design that melts, holds or processes aluminum that contains paint, lubricants, coatings or other foreign materials with or without reactive fluxing or processes clean charge with reactive fluxing.

(19) "Group 2 furnace" means a furnace of any design that melts, holds or processes only clean charge and that performs no fluxing or performs fluxing using only nonreactive, non-HAP-containing, non-HAP-generating gases or agents.

(20) "HCl" means, for the purposes of this subchapter, emissions of hydrogen chloride that serve as a surrogate measure of the total emissions of the HAPs hydrogen chloride, hydrogen fluoride and chlorine.

(21) "In-line fluxer" means a device exterior to a furnace, located in a transfer line from a furnace, used in fluxing molten aluminum; also known as a flux box, degassing box or demagging box.

(22) "Internal scrap" means all aluminum scrap regardless of the level of contamination which originates from castings or extrusions produced by an aluminum die casting facility, aluminum foundry or aluminum extrusion facility, and which remains at all times within the control of the company that produced the castings or extrusions.

(23) "Lime" means calcium oxide or other alkaline reagent.

(24) "Lime-injection" means the continuous addition of lime upstream of a fabric filter.

(25) "Melting and holding furnace" means a group 1 furnace that processes only clean charge, performs melting, holding, and fluxing functions, and does not transfer molten aluminum to or from another furnace except for the purposes of alloy changes, off-specification product drains or maintenance activities.

(26) "Operating cycle" means for a batch process, the period beginning when the feed material is first charged to the operation and ending when all feed material charged to the operation has been processed. For a batch melting and holding furnace process, operating cycle means the period including the charging and melting of scrap aluminum and the fluxing, refining, alloying and tapping of molten aluminum.

(27) "PM" means, for the purposes of this subchapter, emissions of particulate matter that serve as a measure of total particulate emissions and as a surrogate for metal HAPs contained in the particulates, including antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel and selenium.

(28) "Pollution prevention" means source reduction as defined under the Pollution Prevention Act of 1990 (42 USC 13101 to 13109) including equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control, and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water or other resources or protection of natural resources by conservation.

(29) "Reactive fluxing" means the use of any gas, liquid, or solid flux, other than cover flux, that results in a HAP emission. Argon and nitrogen are not reactive and do not produce HAPs.

(30) "Reconstruction" means the replacement of components of an affected source or emission unit such that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable new affected source, and it is technologically and economically feasible for the reconstructed source to meet relevant standards established in this subchapter. Replacement of the refractory in a furnace is routine maintenance and is not a reconstruction. The repair and replacement of in-line fluxer components, such as rotors, shafts, burner tubes, refractory or warped steel, is considered to be routine maintenance and is not considered a reconstruction. In-line fluxers are typically removed to a maintenance or repair area and are replaced with repaired units. The replacement of an existing in-line fluxer with a repaired unit is not considered a reconstruction.

(31) "Residence time" means, for an afterburner, the duration of time required for gases to pass through the afterburner combustion zone. Residence time is calculated by dividing the afterburner combustion zone volume in cubic feet by the volumetric flow rate of the gas stream in actual cubic feet per second.

(32) "Rotary dross cooler" means a water-cooled rotary barrel device that accelerates cooling of dross.

(33) "Runaround scrap" means scrap materials generated on-site by aluminum casting, extruding, rolling, scalping, forging, forming, stamping, cutting and trimming operations and that do not contain paint or solid coatings. Uncoated and unpainted aluminum chips generated by turning, boring, milling and similar machining operations may be clean charge if they have been thermally dried or treated by a centrifugal cleaner, but are not considered to be runaround scrap.

(34) "Scrap dryer, delacquering kiln or decoating kiln" means a unit used primarily to remove various organic contaminants such as oil, paint, lacquer, ink, plastic or rubber from aluminum scrap, including used beverage containers, prior to melting.

(35) "Secondary aluminum processing unit" or "SAPU" means one of the following:

(a) An existing SAPU means all existing group 1 furnaces and all existing in-line fluxers within a secondary aluminum production facility. Each existing group 1 furnace or existing in-line fluxer is considered an emission unit within a secondary aluminum processing unit.

(b) A new SAPU means any combination of individual group 1 furnaces and in-line fluxers within a secondary aluminum processing facility which either were constructed or reconstructed after February 11, 1999, or have been permanently redesignated as new emission units pursuant to s. NR 463.13(11). Each of the group 1 furnaces or in-line fluxers within a new SAPU is considered an emission unit within that secondary aluminum processing unit.

(36) "Secondary aluminum production facility" means any establishment using clean charge, aluminum scrap or dross from aluminum production as the raw material and performing one or more of the following processes: scrap shredding, scrap drying, delacquering or decoating, thermal chip drying, recovery of aluminum from dross, in-line fluxing, dross cooling or furnace operations such as melting, holding, sweating, refining, fluxing or alloying. A secondary aluminum production facility may be independent or part of a primary aluminum production facility. For purposes of this subchapter, aluminum die casting facilities, aluminum foundries and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are clean charge, customer returns or internal scrap, and if they do not operate sweat furnaces, thermal chip dryers, scrap dryers, delacquering kilns or decoating kilns. The determination of whether a facility is a secondary aluminum

production facility is only for purposes of this subchapter and any regulatory requirements which are derived from the applicability of this subchapter, and is separate from any determination which may be made under other environmental laws and regulations, including whether the same facility is a "secondary metal production facility" as that term is used in 42 USC 7479(1) or a "secondary metal production plant" as that term is used in s. NR 405.02(22)(a)1.

(37) "Sidewell" means an open well adjacent to the hearth of a furnace with connecting arches between the hearth and the open well through which molten aluminum is circulated between the hearth, where heat is applied by burners, and the open well, which is used for charging scrap and solid flux or salt to the furnace, injecting fluxing agents and skimming dross.

(38) "Sweat furnace" means a furnace used exclusively to reclaim aluminum from scrap that contains substantial quantities of iron by using heat to separate the low-melting point aluminum from the scrap while the higher melting-point iron remains in solid form.

(39) "TEQ" means the international method of expressing toxicity equivalents for dioxins and furans as defined in Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update (EPA-625/3-89-016), incorporated by reference in s. NR 484.05(12).

(40) "THC" means total hydrocarbon emissions that also serve as a surrogate for the emissions of organic HAP compounds.

(41) "Thermal chip dryer" means a device that uses heat to evaporate oil or oil and water mixtures from unpainted or uncoated aluminum chips. Pre-heating boxes or other dryers which are used solely to remove water from aluminum scrap are not considered to be thermal chip dryers.

(42) "Three-day, 24-hour rolling average" means daily calculations of the average 24-hour emission rate in lb/ton of feed or charge over the 3 most recent consecutive 24-hour periods, for a secondary aluminum processing unit.

(43) "Total reactive chlorine flux injection rate" means the sum of the total weight of chlorine in the gaseous or liquid reactive flux and the total weight of chlorine in the solid reactive chloride flux, divided by the total weight of feed or charge, as determined by the procedure in s. NR 463.163(16)

NR 463.13 Emission standards for affected sources and emission units. (1) SUMMARY.

The owner or operator of a new or existing affected source shall comply with each applicable limit in this section. The following table summarizes the emission standards for each type of source:

Table 1
Emission Standards for New and Existing Affected Sources

Affected source/ Emission Unit	Pollutant	Limit	Units
All new and existing affected sources and emission units that are controlled with a PM add-on control device and that choose to monitor with a COM; and all new and existing aluminum scrap shredders that choose to monitor with a COM or to monitor visible emissions	Opacity	10	percent
New and existing aluminum scrap shredder	PM	0.01	gr/dscf
New and existing thermal chip dryer	THC D&F [a]	0.80 2.50	lb/ton of feed µg TEQ/Mg of feed
New and existing scrap dryer, delacquering kiln, or decoating kiln OR Alternative limits if afterburner has a design residence time of at least 1 second and operates at a temperature of least 1400° F	PM HCl THC D&F [a] PM HCl THC D&F [a]	0.08 0.80 0.06 0.25 0.30 1.50 0.20 5.0	lb/ton of feed lb/ton of feed lb/ton of feed µg TEQ/Mg of feed lb/ton of feed lb/ton of feed lb/ton of feed µg TEQ/Mg of feed
New and existing sweat furnace	D&F [a]	0.80	ng TEQ/dscm @ 11% O_2 [b]
New and existing dross-only furnace	PM	0.30	lb/ton of feed
New and existing in-line fluxer [c]	HCl PM	0.04 0.01	lb/ton of feed lb/ton of feed
New and existing inline fluxer with no reactive fluxing		No Limit	Work practice: no reactive fluxing
New and existing rotary dross cooler	PM	0.04	gr/dscf
New and existing clean furnace (Group 2)		No Limit	Work practices: clean charge only and no reactive fluxing
New and existing group 1 melting and holding furnace (processing only clean charge)[c]	PM HCl	0.80 0.40 or 10	lb/ton of feed lb/ton of feed percent of the HCl upstream of an add-on control device
New and existing group 1 furnace [c]	PM HCl	0.40 0.40 or	lb/ton of feed lb/ton of feed

(gr TEQ/ton) of feed]

n is the number of units in the secondary aluminum processing unit

[e] In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

[f] In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

[g] Clean charge furnaces cannot be included in this calculation since they are not subject to the D&F limit.

(2) ALUMINUM SCRAP SHREDDER. On and after the compliance date established by s. NR 463.115, the owner or operator of an aluminum scrap shredder at a secondary aluminum production facility that is a major source may not discharge or cause to be discharged to the atmosphere either of the following:

(a) Emissions in excess of 0.023 grams of PM per dry standard cubic meter (0.010 grain of PM per dry standard cubic foot).

(b) Visible emissions in excess of 10% opacity from any PM add-on air pollution control device if a continuous opacity monitor (COM) or visible emissions monitoring is chosen as the monitoring option.

(3) THERMAL CHIP DRYER. On and after the compliance date established by s. NR 463.115, the owner or operator of a thermal chip dryer may not discharge or cause to be discharged to the atmosphere emissions in excess of either of the following:

(a) 0.40 kilogram (kg) of THC, as propane, per megagram (Mg) (0.80 lb of THC, as propane, per ton) of feed or charge from a thermal chip dryer at a secondary aluminum production facility that is a major source.

(b) 2.50 micrograms (μg) of D&F TEQ per Mg (3.5×10^{-5} gr per ton) of feed or charge from a thermal chip dryer at a secondary aluminum production facility that is a major or area source.

(4) SCRAP DRYER, DELACQUERING KILN, DECOATING KILN. On and after the compliance date established by s. NR 463.115:

(a) The owner or operator of a scrap dryer, delacquering kiln or decoating kiln may not discharge or cause to be discharged to the atmosphere emissions in excess of any of the following:

1. 0.03 kg of THC, as propane, per Mg (0.06 lb of THC, as propane, per ton) of feed or charge

		10	percent of the HCl upstream of an add-on control device
	D&F [a]	15.0	µg TEQ/Mg of feed
New and existing group 1 furnace [c] with clean charge only	PM	0.40	lb/ton of feed
	HCl	0.40	lb/ton of feed
		or	
		10	percent of the HCl upstream of an add-on control device
	D&F [a]	No Limit	Clean charge only
New and existing secondary aluminum processing unit [a,d] (consists of all existing group 1 furnaces and existing in-line flux boxes at the facility, or all simultaneously constructed new group 1 furnaces and new inline fluxers)	PM [e]	$L_{t_{PM}} = \frac{\sum_{i=1}^{n}(L_{i_{PM}} \times T_i)}{\sum_{i=1}^{n}(T_i)}$	
	HCl [f]	$L_{t_{HCl}} = \frac{\sum_{i=1}^{n}(L_{i_{HCl}} \times T_i)}{\sum_{i=1}^{n}(T_i)}$	
	D&F [g]	$L_{t_{D/F}} = \frac{\sum_{i=1}^{n}(L_{i_{D/F}} \times T_i)}{\sum_{i=1}^{n}(T_i)}$	

[a] D&F limit applies to a unit at a major or area source.

[b] Sweat furnaces equipped with afterburners meeting the specifications of s. NR 463.13(6)(a) are not required to conduct a performance test.

[c] These limits are also used to calculate the limits applicable to secondary aluminum processing units.

[d] Equation definitions:

L_{iPM} is the PM emission limit for individual emission unit i in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]

T_i is the feed rate for individual emission unit i in the secondary aluminum processing unit

L_{tPM} is the overall PM emission limit for the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]

L_{iHCl} is the HCl emission limit for individual emission unit i in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]

L_{tHCl} is the overall HCl emission limit for the secondary aluminum processing unit [kg/Mg (lb/ton) of feed]

$L_{i\ D\&F}$ is the D&F emission limit for individual emission unit i [µg TEQ/Mg (gr TEQ/ton) of feed]

$L_{t\ D\&F}$ is the overall D&F emission limit for the secondary aluminum processing unit [µg TEQ/Mg

from a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major source.

2. 0.04 kg of PM per Mg (0.08 lb per ton) of feed or charge from a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major source.

3. 0.25 µg of D&F TEQ per Mg (3.5×10^{-6} gr of D&F TEQ per ton) of feed or charge from a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major or area source.

4. 0.40 kg of HCl per Mg (0.80 lb per ton) of feed or charge from a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major source.

(b) The owner or operator of a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major source may not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10% opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(5) SCRAP DRYER, DELACQUERING KILN AND DECOATING KILN: ALTERNATIVE LIMITS. The owner or operator of a scrap dryer, delacquering kiln or decoating kiln may choose to comply with the emission limits in this subsection as an alternative to the limits in sub. (4) if the scrap dryer, delacquering kiln or decoating kiln is equipped with an afterburner having a design residence time of at least one second and the afterburner is operated at a temperature of at least 760 °C (1400 °F) at all times. On and after the compliance date established by s. NR 463.115:

(a) The owner or operator of a scrap dryer, delacquering kiln or decoating kiln may not discharge or cause to be discharged to the atmosphere emissions in excess of any of the following:

1. 0.10 kg of THC, as propane, per Mg (0.20 lb of THC, as propane, per ton) of feed or charge from a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major source.

2. 0.15 kg of PM per Mg (0.30 lb per ton) of feed or charge from a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major source.

3. 5.0 µg of D&F TEQ per Mg (7.0×10^{-5} gr of D&F TEQ per ton) of feed or charge from a scrap

dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major or area source.

4. 0.75 kg of HCl per Mg (1.50 lb per ton) of feed or charge from a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major source.

(b) The owner or operator of a scrap dryer, delacquering kiln or decoating kiln at a secondary aluminum production facility that is a major source may not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10% opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(6) SWEAT FURNACE. On and after the compliance date established by s. NR 463.115, the owner or operator of a sweat furnace at a secondary aluminum production facility that is a major or area source may not discharge or cause to be discharged to the atmosphere emissions in excess of 0.80 nanogram (ng) of D&F TEQ per dscm (3.5×10^{-10} gr per dscf) at 11% oxygen. A performance test is not required under s. NR 463.163(6) to demonstrate compliance with this emission standard provided that the owner or operator operates and maintains an afterburner with a design residence time of 0.8 seconds or greater and an operating temperature of 1600°F or greater.

(7) DROSS-ONLY FURNACE. On and after the compliance date established by s. NR 463.115, the owner or operator of a dross-only furnace at a secondary aluminum production facility that is a major source may not discharge or cause to be discharged to the atmosphere either of the following:

(a) Emissions in excess of 0.15 kg of PM per Mg (0.30 lb of PM per ton) of feed or charge.

(b) Visible emissions in excess of 10% opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(8) ROTARY DROSS COOLER. On and after the compliance date established by s. NR 463.115, the owner or operator of a rotary dross cooler at a secondary aluminum production facility that is a major source may not discharge or cause to be discharged to the atmosphere either of the following:

(a) Emissions in excess of 0.09 g of PM per dscm (0.04 gr per dscf).

(b) Visible emissions in excess of 10% opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(9) GROUP 1 FURNACE. The owner or operator of a group 1 furnace shall use the limits in this subsection to determine the emission standards for a SAPU under sub. (11).

(a) 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed or charge from a group 1 furnace, that is not a melting and holding furnace processing only clean charge, at a secondary aluminum production facility that is a major source.

(b) 0.40 kg of PM per Mg (0.80 lb of PM per ton) of feed or charge from a group 1 melting and holding furnace processing only clean charge at a secondary aluminum production facility that is a major source.

(c) 15 µg of D&F TEQ per Mg (2.1×10^{-4} gr of D&F TEQ per ton) of feed or charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source. This limit does not apply if the furnace processes only clean charge.

(d) 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed or charge or, if the furnace is equipped with an add-on air pollution control device, 10% of the uncontrolled HCl emissions, by weight, for a group 1 furnace at a secondary aluminum production facility that is a major source.

(e) The owner or operator of a group 1 furnace at a secondary aluminum production facility that is a major source may not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10% opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(f) The owner or operator may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed or charge.

(g) The owner or operator of a sidewell group 1 furnace that conducts reactive fluxing, except for cover flux, in the hearth, or that conducts reactive fluxing in the sidewell at times when the level of molten metal falls below the top of the passage between the sidewell and the hearth, shall comply with the emission limits of pars. (a) to (d) on the basis of the combined emissions from the sidewell and the hearth.

(10) IN-LINE FLUXER. Except as provided in par. (c) for an in-line fluxer using no reactive flux

material, the owner or operator of an in-line fluxer shall use the limits in this subsection to determine the emission standards for a SAPU under sub. (11).

(a) 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed or charge.

(b) 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed or charge.

(c) The emission limits in pars. (a) and (b) do not apply to an in-line fluxer that uses no reactive flux materials.

(d) The owner or operator of an in-line fluxer at a secondary aluminum production facility that is a major source may not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10% opacity from any PM add-on air pollution control device used to control emissions from the in-line fluxer, if a COM is chosen as the monitoring option.

(e) The owner or operator may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed or charge.

(11) SECONDARY ALUMINUM PROCESSING UNIT. On and after the compliance date established by s. NR 463.115, the owner or operator shall comply with the emission limits calculated using the equations for PM and HCl in pars. (a) and (b) for each secondary aluminum processing unit at a secondary aluminum production facility that is a major source. The owner or operator shall comply with the emission limit calculated using the equation for D&F in par. (c) for each secondary aluminum processing unit at a secondary aluminum production facility that is a major or area source.

(a) The owner or operator may not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of:

$$L_{c_{PM}} = \frac{\sum_{i=1}^{n} \left(L_{ti_{PM}} \times T_{ti} \right)}{\sum_{i=1}^{n} \left(T_{ti} \right)} \qquad \text{(Equation 1)}$$

where:

$L_{ti_{PM}}$ is the PM emission limit for individual emission unit i in sub. (9)(a) and (b) for a group 1 furnace or in sub. (10)(b) for an in-line fluxer

T_{ti} is the feed or charge rate for individual emission unit i

$L_{c_{PM}}$ is the PM emission limit for the secondary aluminum processing unit

Note: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

(b) The owner or operator may not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess of:

$$L_{c_{HCl}} = \frac{\sum_{i=1}^{n}\left(L_{ti_{HCl}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Equation 2)}$$

where:

$L_{ti_{HCl}}$ is the HCl emission limit for individual emission unit i in sub. (9)(d) for a group 1 furnace or in sub. (10)(a) for an in-line fluxer

$L_{c_{HCl}}$ is the HCl emission limit for the secondary aluminum processing unit

Note: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

(c) The owner or operator may not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D&F in excess of:

$$L_{c_{D\&F}} = \frac{\sum_{i=1}^{n}\left(L_{ti_{D\&F}} \times T_{ti}\right)}{\sum_{i=1}^{n}\left(T_{ti}\right)} \qquad \text{(Equation 3)}$$

where:

$L_{ti_{D\&F}}$ is the D&F emission limit for individual emission unit i in sub. (9)(c) for a group 1 furnace

$L_{c_{D\&F}}$ is the D&F emission limit for the secondary aluminum processing unit

Note: Clean charge furnaces cannot be included in this calculation since they are not subject to the D&F limit.

(d) The owner or operator of a SAPU at a secondary aluminum production facility that is a major source may demonstrate compliance with the emission limits of pars. (a) to (c) by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of subs. (9) and (10).

(e) The owner or operator of a SAPU at a secondary aluminum production facility that is an area source may demonstrate compliance with the emission limits of par. (c) by demonstrating that each emission unit within the SAPU is in compliance with the emission limit of sub. (9)(c).

(f) With the prior approval of the department, an owner or operator may redesignate any existing group 1 furnace or in-line fluxer at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any redesignation shall be solely for the purpose of this MACT standard and shall be irreversible.

NR 463.14 Operating requirements. (1) SUMMARY. (a) On and after the compliance date established by s. NR 463.115, the owner or operator shall operate all new and existing affected sources and control equipment according to the requirements in this section.

(b) The owner or operator of an existing sweat furnace that meets the specifications of s. NR 463.13(6)(a) shall operate the sweat furnace and control equipment according to the requirements of this section on and after the compliance date established by s. NR 463.115.

(c) The owner or operator of a new sweat furnace that meets the specifications of s. NR 463.13(6)(a) shall operate the sweat furnace and control equipment according to the requirements of this section by March 23, 2000 or upon startup, whichever is later.

(d) Operating requirements are summarized in the following table.

Table 2

Summary of Operating Requirements for New and Existing Affected Sources and Emission Units

Affected Source Or emission unit	Monitor type, operation, process	Operating Requirements
All affected sources and emission units with an add-on air pollution control device	Emission capture and collection system	Design and install in accordance with Industrial Ventilation: A Manual of Recommended Practice, incorporated by reference in s. NR 484.11(2)(d); operate in accordance with OM&M plan. [b]
All affected sources and emission units subject to production-based (lb/ton of feed) emission limits [a]	Charge or feed weight or production weight	Operate a device that records the weight of each charge; operate in accordance with OM&M plan. [b]
Group 1 furnace, group 2 furnace, in-line fluxer, scrap dryer, delacquering kiln or decoating kiln	Labeling	Identification, operating parameter ranges and operating requirements posted at affected sources and emission units; control device temperature and residence time requirements posted at scrap dryer, delacquering kiln or decoating kiln.
Aluminum scrap shredder with fabric filter	Bag leak detector or	Initiate corrective action within one hour of alarm and complete in accordance with OM&M plan[b]; operate such that alarm does not sound more than 5% of operating time in 6-month period.
	Continuous opacity monitor or	Initiate corrective action within one hour of a 6-minute average opacity reading of 5% or more and complete in accordance with OM&M plan. [b]
	Visual emissions	Initiate corrective action within one hour of any observed visual emissions and complete in accordance with the OM&M plan.[b]
Thermal chip dryer with afterburner	Afterburner operating temperature	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
	Feed material	Operate using only unpainted aluminum chips
Scrap dryer, delacquering kiln, decoating kiln with afterburner and lime-injected fabric filter	Afterburner operating temperature	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
	Bag leak detector or	Initiate corrective action within one hour of alarm and complete in accordance with the OM&M plan[b]; operate such that the alarm does not sound more than 5% of operating time in 6-month period.
	Continuous opacity monitor	Initiate corrective action within one hour of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]

Affected Source Or emission unit	Monitor type, operation, process	Operating Requirements
	Fabric filter inlet temperature	Maintain average fabric filter inlet temperature for each 3-hr period at or below average temperature during the performance test +14 °C (+25 °F).
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during the performance test for continuous injection systems.
Sweat furnace with afterburner	Afterburner operating temperature	If a performance test was conducted, maintain average temperature for each 3-hr period at or above average operating temperature during the performance test; if a performance test was not conducted, and afterburner meets specifications of s. NR 463.13(6)(a), maintain average temperature for each 3-hr period at or above 1600 °F.
	Afterburner operation	Operate in accordance with OM&M plan.[b]
Dross-only furnace with fabric filter	Bag leak detector or	Initiate corrective action within one hour of alarm and complete in accordance with the OM&M plan;[b] operate such that alarm does not sound more than 5% of operating time in 6-month period.
	Continuous opacity monitor	Initiate corrective action within one hour of a 6-minutes average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
	Feed or charge material	Operate using only dross as the feed material.
Rotary dross cooler with fabric filter	Bag leak detector or	Initiate corrective action within one hour of alarm and complete in accordance with the OM&M plan;[b] operate such that alarm does not sound more than 5% of operating time in 6-month period.
	Continuous opacity monitor	Initiate corrective action within one hour of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
In-line fluxer with lime-injected fabric filter, including those that are part of a secondary aluminum processing unit	Bag leak detector	Initiate corrective action within one hour of alarm and complete in accordance with OM&M plan;[b] operate such that alarm does not sound more than 5% or of operating time in a 6-month period.
	Continuous opacity monitor	Initiate corrective action within one hour of 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan.[b]
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during performance test for continuous injection systems.
	Reactive flux injection	Maintain reactive flux injection rate at or below rate

Affected Source Or emission unit	Monitor type, operation, process	Operating Requirements
	rate	used during the performance test for each operating cycle or time period used in the performance test.
In-line fluxer using no reactive flux	Flux material	Use no reactive flux
Group 1 furnace with lime-injected fabric filter, including those that are part of a secondary aluminum processing unit	Bag leak detector or	Initiate corrective action within one hour of alarm; operate such that alarm does not sound more than 5% of operating time in 6-month period; complete corrective action in accordance with the OM&M plan.[b]
	Continuous opacity monitor	Initiate corrective action within one hour of a 6-minute average opacity reading of 5% or more; complete corrective action in accordance with the OM&M plan.[b]
	Fabric filter inlet temperature	Maintain average fabric filter inlet temperature for each 3-hour period at or below average temperature during the performance test +14°C (+25 °F)
	Reactive flux injection rate	Maintain reactive flux injection rate (lb/ton) at or below the rate used during the performance test for each furnace cycle.
	Lime injection rate	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established at performance test for continuous injection systems.
	Maintain molten aluminum level	Operate sidewell furnaces such that the level of molten metal is above the top of the passage between sidewell and hearth during reactive flux injection unless the hearth is also controlled.
	Fluxing in sidewell furnace hearth	Add reactive flux only to the sidewell of the furnace unless the hearth is also controlled
Group 1 furnace without add-on controls, including those that are part of a secondary aluminum processing unit	Reactive flux injection	Maintain reactive flux injection rate (lb/ton) at or below rate used during the performance test for each operating cycle or time period used in the performance test.
	Site-specific monitoring plan[c]	Operate furnace within the range of charge materials, contaminant levels, and parameter values established in the site-specific monitoring plan
	Feed material, melting and holding furnace	Use only clean charge
Clean group 2 furnace	Charge and flux materials	Use only clean charge. Use no reactive flux.

[a] Thermal chip dryers, scrap dryers, delacquering kilns, dross-only furnaces, in-line fluxers and group 1 furnaces including melting and holding furnaces.
[b] OM&M plan- Operation, maintenance, and monitoring plan.
[c] Site-specific monitoring plan. Owners and operators of group 1 furnaces without control devices shall

include a section in their OM&M plan that documents work practices and pollution prevention measures, including procedures for scrap inspection, by which compliance is achieved with emission limits and process or feed parameter-based operating requirements. This plan and the testing to demonstrate adequacy of the monitoring plan shall be developed in coordination with and approved by the department.

(2) LABELING. The owner or operator shall provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer, scrap dryer, delacquering kiln and decoating kiln that identify the applicable emission limits and means of compliance, including all of the following:

(a) The type of affected source or emission unit, such as a scrap dryer, delacquering kiln or decoating kiln, group 1 furnace, group 2 furnace or in-line fluxer.

(b) The applicable operational standards and control methods, including work practice or control device. This includes the type of charge to be used for a furnace, including clean scrap only, all scrap, or other, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the operations maintenance and monitoring plan required by s. NR 463.15(2).

(c) The afterburner operating temperature and design residence time for a scrap dryer, delacquering kiln or decoating kiln.

(3) CAPTURE AND COLLECTION SYSTEMS. For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator shall do all of the following:

(a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of Industrial Ventilation: A Manual of Recommended Practice, incorporated by reference in s. NR 484.11(2)(d).

(b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter.

(c) Operate each capture and collection system according to the procedures and requirements in the operation, maintenance and monitoring (OM&M) plan.

(4) FEED OR CHARGE WEIGHT. The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed or charge shall comply with both

pars. (a) and (b).

(a) Except as provided in par. (c), install and operate a device that measures and records or otherwise determine the weight of feed or charge (or throughput) for each operating cycle or time period used in the performance test.

(b) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

(c) The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed or charge weight to an affected source or emission unit, provided that both of the following conditions are met:

1. The aluminum production weight, rather than feed or charge weight is measured and recorded for all emission units within a SAPU.

2. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed or charge weight.

(5) ALUMINUM SCRAP SHREDDER. The owner or operator of a scrap shredder with emissions controlled by a fabric filter shall operate a bag leak detection system or a continuous opacity monitor or conduct visible emissions observations.

(a) If a bag leak detection system is used to meet the monitoring requirements in s. NR 463.15, the owner or operator shall do all of the following:

1. Initiate corrective action within one hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

2. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5% of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time shall be counted. If corrective action is required, each alarm shall be counted as a minimum of one hour. If the owner or operator takes longer than one hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(b) If a continuous opacity monitoring system is used to meet the monitoring requirements in s.

NR 463.15, the owner or operator shall initiate corrective action within one hour of any 6-minute average reading of 5% or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(c) If visible emission observations are used to meet the monitoring requirements in s. NR 463.15, the owner or operator shall initiate corrective action within one hour of any observation of visible emissions during a daily visible emissions test and complete the corrective action procedures in accordance with the OM&M plan.

(**6**) THERMAL CHIP DRYER. The owner or operator of a thermal chip dryer with emissions controlled by an afterburner shall do all of the following:

(a) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

(b) Operate each afterburner in accordance with the OM&M plan.

(c) Operate each thermal chip dryer using only unpainted aluminum chips as the feedstock.

(**7**) SCRAP DRYER, DELACQUERING KILN OR DECOATING KILN. The owner or operator of a scrap dryer, delacquering kiln or decoating kiln with emissions controlled by an afterburner and a lime-injected fabric filter shall meet pars. (a), (d) and (e) and either par. (b) or (c) as applicable:

(a) For each afterburner, do both of the following:

1. Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

2. Operate each afterburner in accordance with the OM&M plan.

(b) If a bag leak detection system is used to meet the fabric filter monitoring requirements in s. NR 463.15, do both of the following:

1. Initiate corrective action within one hour of a bag leak detection system alarm and complete any necessary corrective action procedures in accordance with the OM&M plan.

2. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5% of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm

time shall be counted. If corrective action is required, each alarm shall be counted as a minimum of one hour. If the owner or operator takes longer than one hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(b) If a continuous opacity monitoring system is used to meet the monitoring requirements in s. NR 463.15, initiate corrective action within one hour of any 6-minute average reading of 5% or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(c) Operate each furnace using dross and salt flux as the sole feedstock.

(**10**) ROTARY DROSS COOLER. The owner or operator of a rotary dross cooler with emissions controlled by a fabric filter shall do one of the following:

(a) If a bag leak detection system is used to meet the monitoring requirements in s. NR 463.15, do both of the following:

1. Initiate corrective action within one hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

2. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5% of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time shall be counted. If corrective action is required, each alarm shall be counted as a minimum of one hour. If the owner or operator takes longer than one hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(b) If a continuous opacity monitoring system is used to meet the monitoring requirements in s. NR 463.15, initiate corrective action within one hour of any 6-minute average reading of 5% or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(**11**) IN-LINE FLUXER. The owner or operator of an in-line fluxer with emissions controlled by a lime-injected fabric filter shall meet pars. (c) and (d) and either par. (a) or (b) as applicable:

(a) If a bag leak detection system is used to meet the monitoring requirements in s. NR 463.15, do both of the following:

1. Initiate corrective action within one hour of a bag leak detection system alarm and complete the

time shall be counted. If corrective action is required, each alarm shall be counted as a minimum of one hour. If the owner or operator takes longer than one hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(c) If a continuous opacity monitoring system is used to meet the monitoring requirements in s. NR 463.15, initiate corrective action within one hour of any 6-minute average reading of 5% or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(d) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the sum of the average temperature established during the performance test, plus 14°C (25°F).

(e) For a continuous injection device, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(8) SWEAT FURNACE. The owner or operator of a sweat furnace with emissions controlled by an afterburner shall do both of the following:

(a) Maintain the 3-hour block average operating temperature of each afterburner at or above one of the following, as appropriate:

1.The average temperature established during the performance test.

2. 871°C (1600°F) if a performance test was not conducted, and the afterburner meets the specifications of s. NR 463.13(6)(a).

(b) Operate each afterburner in accordance with the OM&M plan.

(9) DROSS-ONLY FURNACE. The owner or operator of a dross-only furnace with emissions controlled by a fabric filter shall meet par. (c) and either par. (a) or (b) as appropriate:

(a) If a bag leak detection system is used to meet the monitoring requirements in s. NR 463.15, do both of the following:

1. Initiate corrective action within one hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

2. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5% of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm

corrective action procedures in accordance with the OM&M plan.

2. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5% of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time shall be counted. If corrective action is required, each alarm shall be counted as a minimum of one hour. If the owner or operator takes longer than one hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(b) If a continuous opacity monitoring system is used to meet the monitoring requirements in s. NR 463.15, initiate corrective action within one hour of any 6-minute average reading of 5% or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(c) For a continuous injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(d) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period at or below the average rate established during the performance test for the operating cycle or time period.

(**12**) IN-LINE FLUXER USING NO REACTIVE FLUX MATERIAL. The owner or operator of a new or existing in-line fluxer using no reactive flux materials shall operate each in-line fluxer using no reactive flux materials.

(**13**) GROUP 1 FURNACE WITH ADD-ON AIR POLLUTION CONTROL DEVICES. The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter shall meet pars. (c) to (f) and either par. (a) or (b) as applicable:

(a) If a bag leak detection system is used to meet the monitoring requirements in s. NR 463.15 do all of the following:

1. Initiate corrective action within one hour of a bag leak detection system alarm.

2. Complete the corrective action procedures in accordance with the OM&M plan.

3. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5% of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm

time shall be counted. If corrective action is required, each alarm shall be counted as a minimum of one hour. If the owner or operator takes longer than one hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(b) If a continuous opacity monitoring system is used to meet the monitoring requirements in s. NR 463.15, do both of the following:

1. Initiate corrective action within one hour of any 6-minute average reading of 5% or more opacity.

2. Complete the corrective action procedures in accordance with the OM&M plan.

(c) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the sum of the average temperature established during the performance test, plus 14°C (25°F).

(d) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(e) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period at or below the average rate established during the performance test for the operating cycle or time period.

(f) Operate each sidewell furnace such that both of the following are met:

1.The level of molten metal remains above the top of the passage between the sidewell and hearth during reactive flux injection, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.

2. Reactive flux is added only in the sidewell, unless emissions from both the sidewell and the hearth are included in demonstrating compliance with all applicable emission limits.

(**14**) GROUP 1 FURNACE WITHOUT ADD-ON AIR POLLUTION CONTROL DEVICES. The owner or operator of a group 1 furnace, including a group 1 furnace that is part of a secondary aluminum processing unit, without add-on air pollution control devices shall do all of the following:

(a) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period at or below the average rate established during the performance test for the operating cycle or time period.

(b) Operate each furnace in accordance with the work practice and pollution prevention measures

documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

(c) Operate each group 1 melting and holding furnace subject to the emission standards in s. NR 463.13(9)(b) using only clean charge as the feedstock.

(**15**) GROUP 2 FURNACE. The owner or operator of a new or existing group 2 furnace shall do both of the following:

(a) Operate each furnace using only clean charge as the feedstock.

(b) Operate each furnace using no reactive flux.

(**16**) CORRECTIVE ACTION. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator shall initiate corrective action. Corrective action shall restore operation of the affected source or emission unit, including the process or control device, to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

NR 463.15 Monitoring requirements. (**1**) SUMMARY. On and after the compliance date established by s. NR 463.115, the owner or operator of a new or existing affected source or emission unit shall monitor all control equipment and processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in the following table.

Table 3

Summary of Monitoring Requirements for New and Existing Affected Sources and Emission Units

Affected Source and emission unit	**Monitor type, operation, process**	**Monitoring Requirements**
All affected sources and	Emission capture	Annual inspection of all emission capture,

emission units with an add-on air pollution control device	and collection system	collection, and transport systems to ensure that systems continue to operate in accordance with Industrial Ventilation: A Manual of Recommended Practice, incorporated by reference in s. NR 484.11(2)(d).
All affected sources and emission units subject to production-based, lb/ton of feed or charge, emission limits. [a]	Feed charge weight	Record weight of each feed or charge, weight measurements device of other procedure accuracy of ±1%[b]; calibrate according to manufacturers specifications, or at least once every 6 months
Group 1 furnace, group 2 furnace in-line fluxer, scrap dryer, delacquering kiln or decoating kiln	Labeling	Check monthly to confirm that labels are intact and legible
Aluminum scrap shredder with fabric filter	Bag leak detector or	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance."[c]; Record voltage output from bag leak detector.
	Continuous opacity monitor or	Design and install in accordance with PS-1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	Visual emissions	Conduct and record results of 30-minute daily test in accordance with Method 9 in Appendix A to 40 CFR part 60, incorporated by reference in s. NR 484.04(13).
Thermal Chip dryer with afterburner	Afterburner operating temperature	Continuous measurement device to meet specifications in s. NR 463.15(7)(a); record average temperature for each 15-minute block; determine and record 3-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M[d] plan.
	Feed or charge material	Record identity of each feed or charge; certify feed or charge materials ever 6 months
Scrap dryer, delacquering kiln or decoating kiln with afterburner and lime injected fabric filter	Afterburner operating temperature	Continuous measurement device to meet specifications in s. NR 463.15(7)(a); record temperature for each 15-minute block; determine and record 3-hr block averages.
	Afterburner operation	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M[d] plan.
	Bag leak detector or	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance"[c]; record voltage output from bag leak detector.
	Continuous opacity monitor	Design and install in accordance with PS-1; collect data in accordance with subpart A of 40