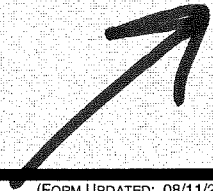


 **07hr_SC-ENR_CRule_06-110_pt02a**



(FORM UPDATED: 08/11/2010)

**WISCONSIN STATE LEGISLATURE ...
PUBLIC HEARING - COMMITTEE RECORDS**

2007-08

(session year)

Senate

(Assembly, Senate or Joint)

**Committee on ... Environment and Natural
Resources (SC-ENR)**

COMMITTEE NOTICES ...

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... **HR** ... **bills and resolutions** (w/Record of Comm. Proceedings)
 - (**ab** = Assembly Bill) (**ar** = Assembly Resolution) (**ajr** = Assembly Joint Resolution)
 - (**sb** = Senate Bill) (**sr** = Senate Resolution) (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

NATURAL RESOURCES BOARD AGENDA ITEM

SUBJECT: Board Order AM-29-06. Incorporation of the national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries into ch. NR 463.

FOR: FEBRUARY 2007 BOARD MEETING

TO BE PRESENTED BY: William Baumann

SUMMARY:

The US EPA promulgated the NESHAP for iron and steel foundries on April 22, 2004 (69 FR 21906), and amended this NESHAP on May 20, 2005 (70 FR 29400). The proposed rule incorporates this NESHAP, as amended, into the Wisconsin Administrative Code by creating ch. NR 463 subchapter III and Appendix EEEEE in ch. NR 460. Chapter NR 484 is also amended to incorporate by reference two test methods.

Section 285.27(2)(a), Stats., requires the Department to promulgate NESHAP into the administrative code. The Natural Resources Board has not acted on this NESHAP before.

Since the proposed regulation is already in effect at the national level, there is little discretion for the Department and there are no policy issues to be resolved. The proposed rule will affect 7 facilities in Wisconsin and could potentially affect an additional 13 facilities in the state.

RECOMMENDATION: That the Board adopt the proposed rules.

LIST OF ATTACHED MATERIALS:

- | | | | |
|--|---|---|----------|
| No <input type="checkbox"/> | Fiscal Estimate Required | Yes <input checked="" type="checkbox"/> | Attached |
| No <input checked="" type="checkbox"/> | Environmental Assessment or Impact Statement Required | Yes <input type="checkbox"/> | Attached |
| No <input type="checkbox"/> | Background Memo | Yes <input checked="" type="checkbox"/> | Attached |

APPROVED: 

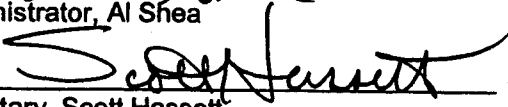
Bureau Director, Kevin Kessler - Acting

1/22/07
Date



Administrator, Al Shea

1/25/07
Date



Secretary, Scott Hassett

1/25/07
Date

cc: Amy Lemberger - AD/5
Carol Turner - LS/5

K. Kessler - AM/7
R. Eckdale - AM/7 (5)

E. Mosher - AM/7(5)

STAFF REVIEW - DNR BOARD AGENDA ITEM

REMINDER

Have the following questions been answered under the summary section of this form?

- -Why is the rule needed?
- -What are the significant changes?
- -What are the key issues/controversies?
- -What was the last action of the Board?

LIST OF ATTACHED REFERENCE MATERIAL REQUIRED FOR RULE PROPOSALS:

Hearing authorization:

Background memo (if needed)*
 Fiscal Estimate
 Environmental Assessment (if needed)
 Rule

Final adoption:

Background Memo (if needed)*
 Response Summary
 Fiscal Estimate
 Environmental Assessment (if needed)
 Rule

* If all the questions listed in the REMINDER section above can be adequately summarized on the Green Sheet (and a second sheet if needed), the Background Memo may be omitted.

Unit	Reviewer	Date	Comments
Environmental Analysis and Review	JDP	01/22/2007	
Management and Budget	UP	01/22/07	
Legal Services -Program Attorney -Carol Turner	MS CT	1/24/7 1/24/07	
Other (if applicable)			

DATE: January 22, 2007

FILE REF: 4503-12

TO: Natural Resources Board Members

FROM: Scott Hassett, Secretary

SUBJECT: Background Memo on Adoption of Order AM-29-06 pertaining to incorporation of the national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries into ch. NR 463

Why is this rule being proposed?

Section 112 of the Clean Air Act, as amended in 1990, requires that the US Environmental Protection Agency (EPA) promulgate emission standards for all categories of major sources of hazardous air pollutants (HAP). 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 HAP. On July 16, 1992, the EPA published an initial list of source categories, which includes iron and steel foundries. The Act specifies that these standards require the maximum reduction in HAP emissions that the EPA determines is achievable, considering cost, non-air-quality health and environmental impacts, and energy requirements. These standards ensure that all major sources of HAP emissions achieve the level of control already being achieved by the better controlled and lower emitting sources in each category (also known as maximum achievable control technology or MACT).

The EPA promulgated the final NESHAP for iron and steel foundries on April 22, 2004 (69 FR 21906) and amended the rule on May 20, 2005 (70 FR 29400). This NESHAP is contained in 40 CFR part 63, subpart EEEEE.

Section 285.27(2), Stats., requires the Department to promulgate by rule any federal NESHAP promulgated under section 112 of the Clean Air Act.

Summary of the rule

The proposed rule will regulate the emissions of hazardous air pollutants from those iron and steel foundries which are major sources of federal HAPs (affected sources). The proposed rule specifies particulate matter, total metal HAP, volatile organic HAP (VOHAP), and triethylamine (TEA) emission limits for various foundry processes, including scrap preheating, metal melting and pouring, and mold making. The rule also specifies operating limits for emission control devices, work practice standards for scrap selection and preheating, and includes operation and maintenance requirements that apply to control devices and capture systems.

Existing affected sources have until April 23, 2007 to achieve compliance. New or reconstructed affected sources must achieve compliance by April 22, 2004 (if initial startup is before that date) or the date of initial startup. Sources have until their final compliance date to reduce HAP emissions below the major source level and thereby avoid the rule. Sources may also become a synthetic minor HAP source to avoid the rule by obtaining and complying with a federally enforceable permit that restricts HAP emissions prior to the final compliance date.

Affected sources are required to use performance testing to demonstrate compliance with the emission limits and operating limits. Sources may instead use continuous monitoring systems to track and document emissions and operating parameters. Visual inspections, documented periodic preventive maintenance, and other methods are specified in the rule to demonstrate compliance with work practice standards and operation and maintenance requirements. Affected sources must maintain continuous compliance with the emission limits, work practice standards and operating limits

Affected sources must notify the Department that they are affected sources. Affected sources must submit semiannual compliance reports, including any deviations from emission limits, operating limits or work practice standards. Affected sources must also develop a startup, shutdown, and malfunction plan.

The proposed rule is identical to the federal NESHAP, except for punctuation, capitalization, numbering, and non-substantive wording and organizational changes made to accommodate state rule form and style requirements and, in some cases, to improve clarity. Because the substance of the proposed rule is identical to the rule already in effect at the federal level, no controversy is expected.

How this proposal affects existing policy

Proposal of this rule is consistent with existing policy, which is to adopt and enforce federal NESHAP via the Wisconsin Administrative Code.

Hearing Synopsis

One hearing was held in Madison on November 16, 2006. Attorney Mike Scott from the Bureau of Legal Services presided as the hearing examiner and Eric Mosher represented the Bureau of Air Management. No one appeared at the hearing.

Written comments were received from the Legislative Council Rules Clearinghouse concerning form, style, clarity, grammar, punctuation and the use of plain language. Most of the comments suggested minor changes to the proposed rule to correct punctuation or improve clarity, and those changes were made. Several comments suggested more significant changes to the proposed rule. These comments and the responses to them are:

1. **Comment:** "Volatile organic hazardous air pollutant (VOHAP) should be defined in s. NR 463.22." This term is used in the rule but is not defined.

Response: The rule drafter has notified the EPA about this deficiency in the federal rule. They seem to recognize the need for a definition. They are currently developing a technical amendment package for this rule, and they are considering whether to include a VOHAP definition in that package.

It is not appropriate nor advisable for the state to develop a state-only VOHAP definition, since state statute requires the adoption the federal rule as written. When the federal rule is amended to include a VOHAP definition, then the state rule will be amended to include that definition.

2. **Comment:** The term "triethylamine (TEA)" should be defined.

Response: Triethylamine is the name of a chemical compound, and, as such, does not need to be defined, just as the terms “water” and “oxygen” do not need to be defined. Information on chemical compounds is readily available from many sources.

3. **Comment:** “In s. NR 463.21(4)(f), it is unclear what types of sources are required to meet the notification and schedule requirements.”

Response: The wording of s. NR 463.21(4)(f) was not changed. A definition of “you” or “your” was added in s. NR 463.22(31) to clarify the types of sources required to meet the requirements.

4. **Comment:** “In s. NR 463.21(2)(a), the term “charge make-up” is vague; can this term be clarified in the rule?”

Response: The original wording in the sentence referred to was: “You may have certain scrap subject to par. (b) and other scrap subject to par. (c) at your facility, provided the scrap remains segregated until charge make-up.” In the revised rule, the phrase “charge make-up” is replaced with “being aggregated to make up the charge for the furnace.”

Information on environmental analysis

Adoption of an existing federal regulation does not require an environmental analysis as provided under s. NR 150.03(6)(b)3.b., Wis. Adm. Code.

Final regulatory flexibility analysis

The proposed rule will not have a significant economic impact on a substantial number of small businesses. 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 April 22, 2004. No additional costs will be incurred in response to the proposed state rule.

Also note that the Department cannot make the proposed rule more stringent or less stringent than the existing federal rule, even for small businesses. 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 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.

The proposed rules allow sources with Title V permits to combine their periodic NESHAP compliance reports with their Title V compliance reports.

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

The proposed rules establish emission limits, operating limits and work practice standards.

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

The proposed rule applies only to major sources of hazardous air pollutant (HAP) emissions. Major sources are sources which emit, or have the potential to emit, 10 tons per year or more of any single HAP or 25 tons per year or more of any combination of HAPs. Applying the rule only to major sources has the same effect as exempting minor sources. Most small businesses are not major sources of HAP emissions, and would thus be exempt from the rule.

- 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 businesses, small or large, appeared at the public hearing. No issues were raised by small businesses 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.

Semiannual Compliance Reports - Documentation of ongoing compliance submitted twice per year.

Immediate Startup, Shutdown, and Malfunction Reports - These are required of an affected source only if and when the source has a startup, shutdown, or malfunction and takes actions that are not consistent with the source's startup, shutdown, and malfunction plan. This report must be submitted by telephone or fax within two working days after starting actions inconsistent with the plan and by letter within seven working days after the end of the event.

Recordkeeping and reporting costs have not been estimated. 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.

The US EPA has estimated the average annual compliance cost for small entities to be \$163,000. However, 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.

- 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.

Fiscal Estimate — 2003 Session

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Updated	LRB Number	Amendment Number if Applicable
<input type="checkbox"/> Corrected	<input type="checkbox"/> Supplemental	Bill Number	Administrative Rule Number NR 463

Subject
 Incorporation of the national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries into ch. NR 463.

Fiscal Effect

State: No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

- | | |
|--|---|
| <input type="checkbox"/> Increase Existing Appropriation | <input type="checkbox"/> Increase Existing Revenues |
| <input type="checkbox"/> Decrease Existing Appropriation | <input type="checkbox"/> Decrease Existing Revenues |
| <input type="checkbox"/> Create New Appropriation | |

Increase Costs — May be possible to absorb within agency's budget.
 Yes No

Decrease Costs

Local: No Local Government Costs

1. Increase Costs
 Permissive Mandatory
2. Decrease Costs
 Permissive Mandatory

3. Increase Revenues
 Permissive Mandatory
4. Decrease Revenues
 Permissive Mandatory

5. Types of Local Governmental Units Affected:
 Towns Villages Cities
 Counties Others _____
 School Districts WTCS Districts

Fund Sources Affected

- GPR FED PRO PRS SEG SEG-S

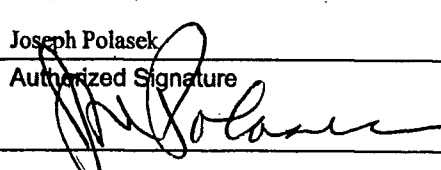
Affected Chapter 20 Appropriations

Assumptions Used in Arriving at Fiscal Estimate

- No action is required by local units of government, so there will be no fiscal impact on local government.
- The Department has been delegated authority by the USEPA to enforce existing federal regulations pertaining to national emission standards for hazardous air pollutants (NESHAP).
- The proposed rule will promulgate an existing federal NESHAP regulation (already in effect) into the state Administrative Code.
- As part of the air permit streamlining initiative (APP^{II}), the Air Program is developing alternative permit tools to regulate air emission sources. We anticipate that these tools will require less staff time to implement, and that staff time can be redirected to compliance activities. Consequently, we do not believe that additional staff resources will be needed.
- All sources affected under the foundry NESHAP are currently in the process of complying with the existing federal rule. Any compliance costs to Wisconsin businesses (small or large) are being incurred in response to the federal rule, and adoption of the proposed state rule will result in no additional compliance costs.

Long-Range Fiscal Implications

None

Prepared By: Joseph Polasek	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 08-24-06

Fiscal Estimate — 2003 Session

**Page 2 Assumptions Narrative
Continued**

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number

Assumptions Used in Arriving at Fiscal Estimate – Continued

Fiscal Estimate Worksheet — 2003 Session
 Detailed Estimate of Annual Fiscal Effect

Original Updated
 Corrected Supplemental

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number NR 463

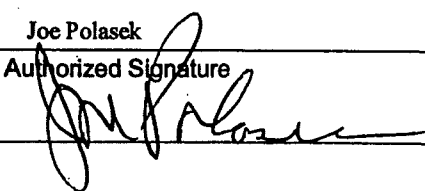
Subject
 Incorporation of the national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries into ch. NR 463.

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):
 None

Annualized Costs:		Annualized Fiscal Impact on State Funds from:	
		Increased Costs	Decreased Costs
A. State Costs by Category			
State Operations — Salaries and Fringes	\$	\$ -	
(FTE Position Changes)	(FTE)	(- FTE)
State Operations — Other Costs		-	
Local Assistance		-	
Aids to Individuals or Organizations		-	
Total State Costs by Category	\$	\$ -	
B. State Costs by Source of Funds			
GPR	\$	\$ -	
FED		-	
PRO/PRS		-	
SEG/SEG-S		-	
State Revenues	Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)	Increased Revenue	Decreased Revenue
GPR Taxes		\$	\$ -
GPR Earned			-
FED			-
PRO/PRS			-
SEG/SEG-S			-
Total State Revenues	\$	\$ -	

Net Annualized Fiscal Impact

	<u>State</u>		<u>Local</u>	
Net Change in Costs	\$	0.00	\$	0.00
Net Change in Revenues	\$	0.00	\$	0.00

Prepared By: Joe Polasek	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 08-24-06

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

The Wisconsin Natural Resources Board adopts an order to amend NR 484.06(4)(c) and (e) and to create NR 460 Appendix EEEEE and 463 Subchapter III relating to national emission standards for hazardous air pollutants for iron and steel foundries.

AM-29-06

Analysis Prepared by the Department of Natural Resources

Statutes interpreted: ss. 285.11(6) and 285.27(2)(a), Stats.

Statutory authority: ss. 227.11(2)(a), 227.14(1m), 285.11(1) and 285.27(2)(a), 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 iron and steel foundries on April 22, 2004 (40 CFR Part 63, Subpart EEEEE) and revised this rule on May 20, 2005 (70 FR 29400). The NESHAP establishes maximum achievable control technology (MACT) requirements for this source category. The proposed rule will incorporate this NESHAP, as revised, into the Wisconsin Administrative Code.

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. 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/ifoundry/ifoundrypg.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/ifoundry/ifoundrypg.html>.

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.

Agency contact person (including e-mail address and telephone number):
Eric Mosher - 608-266-3010, Eric.Mosher@dnr.state.wi.us

SECTION 1. NR 460 Appendix EEEEE is created to read:

Chapter NR 460

Appendix EEEEE

General Provisions Applicability to Chapter NR 463 Subchapter III

The general provisions of this chapter listed under the column heading "Reference" apply to sources subject to ch. NR 463 subch. III only if a Yes appears in the same row under the column heading "Applies to Chapter NR 463 Subchapter III?". 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	Subject	Applies to Chapter NR 463 Subchapter III?	Explanation
NR 2.19 and 2.195	Availability of information and confidentiality	Yes	
NR 406	Construction and reconstruction	Yes	
NR 460.01(1)	Applicability	Yes	
NR 460.02	Definitions	Yes	
NR 460.03	Units and abbreviations	Yes	
NR 460.04	Prohibited activities	Yes	
NR 460.05(1) to (5)	Compliance with standards and maintenance requirements	Yes	
NR 460.05(6)	Compliance with opacity and visible emission standards	Yes	
NR 460.05(7)	Compliance extension	Yes	
NR 460.06(1)	Applicability and performance test dates	No	Chapter NR 463 subchapter III specifies applicability and performance test dates.
NR 460.06(2) to (7)	Performance testing requirements	Yes	
NR 460.07(1)(a) and (b), (2), (3)(a) to (c) and (f) to (h), (4), (5) and (6)	Monitoring requirements	Yes	Chapter NR 463 subchapter III specifies requirements for alternative monitoring systems.
NR 460.07(1)(c)	Additional monitoring	No	Chapter NR 463 subchapter III

	requirements for control devices in s. NR 460.10		does not require flares.
NR 460.07(3)(d)	Continuous monitoring system (CMS) requirements	No	Chapter NR 463 subchapter III specifies requirements for operation of CMS and CEMS.
NR 460.07(3)(e)	Continuous opacity monitoring system (COMS) minimum procedures	No	Chapter NR 463 subchapter III does not require COMS.
NR 460.07(7)	Data reduction	No	Chapter NR 463 subchapter III specifies data reduction requirements.
NR 460.08	Notification requirements	Yes	
NR 460.09(1), (2), (3)(a)1. to 3. and 6. to 10., (4)(a) and (b), (5)(a) and (b) and (6)	Recordkeeping and recording requirements	Yes	Additional records for CMS in s. NR 460.09(3)(a)1. to 3. and 6. to 10. apply only to CEMS.
NR 460.09(3)(a)4. and 5.	Records of excess emissions and parameter monitoring exceedances for CMS	No	Chapter NR 463 subchapter III specifies records requirements.
NR 460.09(4)(c)	Reporting opacity or visible emissions observations	Yes	
NR 460.09(5)(c)	Excess emissions reports	No	Chapter NR 463 subchapter III specifies reporting requirements.
NR 460.09(5)(d)	Reporting COMS data	No	Chapter NR 463 subchapter III does not require COMS
NR 460.10	Control device requirements	No	Chapter NR 463 subchapter III does not require flares.
NR 484	Incorporation by reference	Yes	

SECTION 2. NR 463 subchapter III is created to read:

Subchapter III

Iron and Steel Foundries

NR 463.21 What this subchapter covers. (1) **WHAT IS THE PURPOSE OF THIS SUBCHAPTER?** This subchapter establishes national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries. This subchapter also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations, work practice standards and operation and maintenance requirements in this subchapter.

(2) **AM I SUBJECT TO THIS SUBCHAPTER?** You are subject to this subchapter if you own or operate an iron and steel foundry that is, or is part of, a major source of hazardous air pollutant (HAP) emissions. Your iron and steel foundry is a major source of HAP for purposes of this subchapter if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or

if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

(3) WHAT PARTS OF MY FOUNDRY DOES THIS SUBCHAPTER COVER? (a) The affected source is a new or existing iron and steel foundry.

(b) This subchapter covers emissions from metal melting furnaces, scrap pre-heaters, pouring areas, pouring stations, automated conveyor and pallet cooling lines, automated shakeout lines and mold and core making lines. This subchapter also covers fugitive emissions from foundry operations.

(c) An affected source is existing if you commenced construction or reconstruction of the affected source before December 23, 2002.

(d) An affected source is new if you commenced construction or reconstruction of the affected source on or after December 23, 2002. An affected source is reconstructed if it meets the definition of "reconstruction" in s. NR 463.22.

(4) WHEN DO I HAVE TO COMPLY WITH THIS SUBCHAPTER? (a) Except as specified in par. (b), if you have an existing affected source, you shall comply with each emissions limitation, work practice standard and operation and maintenance requirement in this subchapter that applies to you no later than April 23, 2007. Major source status for existing affected sources shall be determined no later than April 23, 2007.

(b) If you have an existing affected source, you shall comply with the work practice standards in s. NR 463.23(2)(b) or (c), as applicable, no later than April 22, 2005.

(c) If you have a new affected source for which the initial startup date is on or before April 22, 2004, you shall comply with each emissions limitation, work practice standard and operation and maintenance requirement in this subchapter that applies to you by April 22, 2004.

(d) If you have a new affected source for which the initial startup date is after April 22, 2004, you shall comply with each emissions limitation, work practice standard and operation and maintenance requirement in this subchapter that applies to you upon initial startup.

(e) If your iron and steel foundry is an area source that becomes a major source of HAP, you shall meet the requirements of s. NR 460.05(3)(c).

(f) You shall meet the notification and schedule requirements in s. NR 463.27(1).

Note: Several of these notifications must be submitted before the compliance date for your affected source.

NR 463.22 What definitions apply to this subchapter? 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 precedence 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) "Automated conveyor and pallet cooling line" means any dedicated conveyor line or area used for cooling molds received from pouring stations.

(2) "Automated shakeout line" means any mechanical process unit designed for and dedicated to separating a casting from a mold. These mechanical processes include shaker decks, rotary separators and high-frequency vibration units. Automated shakeout lines do not include manual processes for separating a casting from a mold, such as personnel using a hammer, chisel, pick ax, sledge hammer or jackhammer.

(3) "Bag leak detection system" means a system that is capable of continuously monitoring relative particulate matter loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance or other effect to continuously monitor relative particulate matter loadings.

(4) "Binder chemical" means a component of a system of chemicals used to bind sand together into molds, mold sections and cores through chemical reaction as opposed to pressure.

(5) "Capture system" means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device or to the atmosphere. A capture system may include the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums and fans.

(6) "Cold box mold or core making line" means a mold or core making line in which the formed aggregate is hardened by catalysis with a gas.

(7) "Combustion device" means an afterburner, thermal incinerator or scrap preheater.

(8) "Conveyance" means the system of equipment that is designed to capture pollutants at the source, convey them through ductwork and exhaust them using forced ventilation. A conveyance may include control equipment designed to reduce emissions of the pollutants. Emissions that are released through windows, vents or other general building ventilation or exhaust systems are not considered to be discharged through a conveyance.

(9) "Cooling" means the process of molten metal solidification within the mold and subsequent temperature reduction prior to shakeout.

(10) "Cupola" means a vertical cylindrical shaft furnace that uses coke and forms of iron and steel such as scrap and foundry returns as the primary charge components and melts the iron and steel through combustion of the coke by a forced upward flow of heated air.

(11) "Deviation" means any instance in which an affected source or an owner or operator of an affected source fails to meet any of the following:

(a) Any requirement or obligation established by this subchapter, including any emission limitation, operating limit, work practice standard or operation and maintenance requirement.

(b) Any term or condition that is adopted to implement an applicable requirement in this subchapter and that is included in the operating permit for any iron and steel foundry required to obtain an operating permit.

(c) Any emission limitation, operating limit or work practice standard in this subchapter during startup, shutdown or malfunction, regardless of whether or not the failure is permitted by this subchapter.

(12) "Electric arc furnace" means a vessel in which forms of iron and steel, such as scrap and foundry returns, are melted through resistance heating by an electric current flowing through the arcs formed between the electrodes and the surface of the metal and also flowing through the metal between the arc paths.

(13) "Electric induction furnace" means a vessel in which forms of iron and steel, such as scrap and foundry returns, are melted through resistance heating by an electric current that is induced in the metal by passing an alternating current through a coil surrounding the metal charge or surrounding a pool of molten metal at the bottom of the vessel.

(14) "Emissions limitation" has the meaning given in s. 285.01(16), Stats., and includes any operating limit specified in this subchapter.

(15) "Exhaust stream" means gases emitted from a process through a conveyance, as defined in sub. (8).

(16) "Free organic liquids" means material that fails the paint filter test by Method 9095A, "Paint Filter Liquids Test", Revision 1, December 1996, as published in EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", incorporated by reference in s. NR 484.06(4)(e). If any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains free liquids.

(17) "Fresh acid solution" means a sulfuric acid solution used for the control of triethylamine emissions that has a pH of 2.0 or less.

(18) "Fugitive emissions" means any pollutant released to the atmosphere that is not discharged through a conveyance, as defined in sub. (8).

(19) "Furan warm box mold or core making line" means a mold or core making line in which the binder chemical system used is that system commonly designated as a furan warm box system by the foundry industry.

(20) "Iron and steel foundry" means a facility or portion of a facility that melts one or more of the following: scrap, ingot or other forms of iron and steel, and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. Research and development facilities and operations that only produce non-commercial castings are not included in this definition.

(21) "Metal melting furnace" means a cupola, electric arc furnace or electric induction furnace that converts one or more of the following: scrap, foundry returns and other solid forms of iron and steel to a liquid state. Metal melting furnace does not include a holding furnace, an argon oxygen decarburization vessel or ladle that receives molten metal from a metal melting furnace, and to which metal ingots or other material may be added to adjust the metal chemistry.

(22) "Mold or core making line" means the collection of equipment that is used to mix an aggregate of sand and binder chemicals, form the aggregate into final shape and harden the formed aggregate. A mold or core making line does not include a line for making green sand molds or cores.

(23) "Mold vent" means an intentional opening in a mold through which gases containing pyrolysis products of organic mold and core constituents produced by contact with or proximity to molten metal normally escape the mold during and after metal pouring.

(24) "Monitoring malfunction" means any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(25) "Pouring area" means an area, generally associated with floor and pit molding operations, in which molten metal is brought to each individual mold. Pouring areas include all pouring operations that are not pouring station.

(26) "Pouring station" means the fixed location to which molds are brought in a continuous or semi-continuous manner to receive molten metal, after which the molds are moved to a cooling area.

(27) "Responsible official" has the meaning given in s. NR 400.02(136).

(28) "Scrap preheater" means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate moisture and other volatile impurities or tramp materials by direct flame heating or similar means of heating.

(29) "Scrubber blowdown" means liquor or slurry discharged from a wet scrubber that is either removed as a waste stream or processed to remove impurities or adjust its composition or pH before being returned to the scrubber.

(30) "Work practice standard" means any design, equipment, work practice, operational standard or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act (42 USC 7412(h)).

(31) "You" or "your" means the owner or operator of an iron and steel foundry.

NR 463.23 Emissions limitations, work practice standards and operation and maintenance requirements. (1) WHAT EMISSION LIMITS MUST I MEET? (a) You shall meet each of the following emission limits or standards that applies to you:

1. For each electric arc metal melting furnace, electric induction metal melting furnace or scrap preheater at an existing iron and steel foundry, as described in s. NR 463.21(3)(c), you may not discharge emissions through a conveyance to the atmosphere that exceed either the limit for particulate matter (PM) in subd. 1.a. or the limit for total metal HAP in subd. 1.b.:

a. 0.005 gr/dscf of PM.

b. 0.0004 gr/dscf of total metal HAP.

2. For each cupola metal melting furnace at an existing iron and steel foundry, as described in s. NR 463.21(3)(c), you may not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in subd. 2.a. or the limit for total metal HAP in subd. 2.b.:

a. 0.006 gr/dscf of PM.

b. 0.0005 gr/dscf of total metal HAP.

3. For each cupola metal melting furnace or electric arc metal melting furnace at a new iron and steel foundry, as described in s. NR 463.21(3)(d), you may not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in subd. 3.a. or, alternatively, the limit for total metal HAP in subd. 3.b.:

a. 0.002 gr/dscf of PM.

b. 0.0002 gr/dscf of total metal HAP.

4. For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry, as described in s. NR 463.21(3)(d), you may not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in subd. 4.a. or, alternatively, the limit for total metal HAP in subd. 4.b.:

a. 0.001 gr/dscf of PM.

b. 0.00008 gr/dscf of total metal HAP.

5. For each pouring station at an existing iron and steel foundry, as described in s. NR 463.21(3)(c), you may not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in subd. 5.a. or, alternatively, the limit for total metal HAP in subd. 5.b.:

a. 0.010 gr/dscf of PM.

b. 0.0008 gr/dscf of total metal HAP.

6. For each pouring area or pouring station at a new iron and steel foundry, as described in s. NR 463.21(3)(d), you may not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in subd. 6.a. or, alternatively, the limit for total metal HAP in subd. 6.b. :

a. 0.002 gr/dscf of PM.

b. 0.0002 gr/dscf of total metal HAP.

7. For each building or structure housing any emissions source at the iron and steel foundry, you may not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20% averaged over 6 minutes except for one 6-minute average per hour that does not exceed 27% opacity.

8. For each cupola metal melting furnace at a new or existing iron and steel foundry, you may not discharge emissions of volatile organic hazardous air pollutants (VOHAP) through a conveyance to the atmosphere that exceed 20 parts per million by volume (ppmv) corrected to 10% oxygen.

9. As an alternative to the work practice standard in sub. (2)(e) for a scrap preheater at an existing iron and steel foundry or in sub. (2)(f) for a scrap preheater at a new iron and steel foundry, as described in s. NR 463.21(3)(d), you may not discharge emissions of VOHAP through a conveyance to the atmosphere that exceed 20 ppmv.

10. For one or more automated conveyor and pallet cooling lines that use a sand mold system, or one or more automated shakeout lines that use a sand mold system, at a new iron and steel foundry, as described in s. NR 463.21(3)(d), you may not discharge emissions of VOHAP through a conveyance to the atmosphere that exceed a flow-weighted average of 20 ppmv.

11. For each triethylamine (TEA) cold box mold or core making line at a new or existing iron and steel foundry, you shall meet either the emission limit in subd. 11.a. or the emission standard in subd. 11.b.:

a. You may not discharge emissions of TEA through a conveyance to the atmosphere that exceed 1 ppmv, as determined when scrubbing with fresh acid solution.

b. You shall reduce emissions of TEA from each TEA cold box mold or core making line by at least 99%, as determined when scrubbing with fresh acid solution.

(b) You shall meet each of the following operating limits that applies to you:

1. You shall install, operate and maintain a capture and collection system for all emission sources subject to an emission limit or standard for VOHAP or TEA in par. (a)8. to 11. in accordance with both of the following:

a. Each capture and collection system shall meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.

Note: Publications of the American Conference of Governmental Industrial Hygienists may be obtained at:
American Conference of Governmental Industrial Hygienists

1330 Kemper Meadow Drive
Cincinnati, Ohio 45240
(513) 742-2020
mail@acgih.org
www.acgih.org

b. You shall operate each capture system at or above the lowest value or settings established as operating limits in your operation and maintenance plan.

2. You shall operate each wet scrubber applied to emissions from a metal melting furnace, scrap preheater, pouring area or pouring station subject to an emission limit for PM or total metal HAP in par. (a)1. to 6. to insure that the 3-hour average pressure drop and scrubber water flow rate does not fall below the minimum levels established during the initial or subsequent performance test.

3. You shall operate each combustion device applied to emissions from a cupola metal melting furnace subject to the emission limit for VOHAP in par. (a)8. to insure that the 15-minute average combustion zone temperature does not fall below 1,300°F. Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition are not included in the 15-minute average.

4. You shall operate each combustion device applied to emissions from a scrap preheater subject to the emission limit for VOHAP in par. (a)9. or from a TEA cold box mold or core making line subject to the emission limit for TEA in par. (a)11. to insure that the 3-hour average combustion zone temperature does not fall below the minimum level established during the initial or subsequent performance test.

5. You shall operate each wet acid scrubber applied to emissions from a TEA cold box mold or core making line subject to the emission limit for TEA in par. (a)11. to insure both of the following:

a. The 3-hour average scrubbing liquid flow rate does not fall below the minimum level established during the initial or subsequent performance test.

b. The 3-hour average pH of the scrubber blowdown, as measured by a continuous parameter monitoring system (CPMS), does not exceed 4.5 or the pH of the scrubber blowdown, as measured once every 8 hours during process operations, does not exceed 4.5.

(c) If you use a control device other than a baghouse, wet scrubber, wet acid scrubber or combustion device, you shall prepare and submit a monitoring plan. The monitoring plan is subject to approval by the department and shall contain all of the following:

1. A description of the device.
2. Test results collected in accordance with s. NR 463.25(3) verifying the performance of the device for reducing emissions of PM, total metal HAP, VOHAP or TEA to the levels required by this subchapter.
3. A copy of the operation and maintenance plan required by sub. (3)(b).
4. A list of appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limitations.
5. Operating parameter limits based on monitoring data collected during the performance test.

(2) WHAT WORK PRACTICE STANDARD MUST I MEET? (a) For each segregated scrap storage area, bin or pile, you shall either comply with the certification requirements in par. (b) or prepare and implement a plan for the selection and inspection of scrap according to the requirements in par. (c). You may have certain scrap subject to par. (b) and other scrap subject to par. (c) at your facility, provided the scrap remains segregated until being aggregated to make up the charge for the furnace.

(b) If you elect to meet this paragraph as allowed under par. (a), you shall prepare, and operate at all times according to, a written certification that the foundry purchases and uses only metal ingots, pig iron, slitter or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics or free organic liquids, as defined in s. NR 423.02(16). Any post-consumer engine blocks, post-consumer oil filters or oily turnings that are processed and cleaned, to the extent practicable, such that the material do not include lead components, mercury switches, plastics or free organic liquids may be included in this certification.

(c) If you elect to meet this paragraph as allowed under par. (a), you shall prepare and operate at all times according to a written plan for the selection and inspection of iron and steel scrap to minimize, to the extent practicable, the amount of organics and HAP metals in the charge materials used by the iron and steel foundry. This scrap selection and inspection plan is subject to approval by the department. You shall keep a copy of the plan onsite

and readily available to all plant personnel with materials acquisition or inspection duties. You shall provide a copy of the material specifications to each of your scrap vendors. Each plan shall include all of the following information:

1. A materials acquisition program to limit organic contaminants according to the following requirements as applicable:

a. For scrap charged to a scrap preheater, electric arc metal melting furnace or electric induction metal melting furnaces, specifications for scrap materials to be depleted, to the extent practicable, of the presence of used oil filters, plastic parts and organic liquids, and a program to ensure the scrap materials are drained of free liquids.

b. For scrap charged to a cupola metal melting furnace, specifications for scrap materials to be depleted, to the extent practicable, of the presence of plastic, and a program to ensure the scrap materials are drained of free liquids.

2. A materials acquisition program specifying that the scrap supplier remove accessible mercury switches from the trunks and hoods of any automotive bodies contained in the scrap and remove accessible lead components such as batteries and wheel weights. You shall obtain and maintain onsite a copy of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.

3. Procedures for visual inspection of a representative portion, but not less than 10%, of all incoming scrap shipments to ensure the materials meet the specifications. The inspection procedures shall do all of the following:

a. Identify the locations where inspections are to be performed for each type of shipment. Inspections may be performed at the scrap supplier's facility. The selected locations shall provide a reasonable vantage point, considering worker safety, for visual inspection.

b. Include recordkeeping requirements for the documentation of each visual inspection including the results.

c. Include provisions for rejecting or returning entire or partial scrap shipments that do not meet specifications and limiting purchases from vendors whose shipments fail to meet specifications for more than 3 inspections in one calendar year.

d. If the inspections are performed at the scrap supplier's facility, include an explanation of how the periodic inspections ensure that not less than 10% of scrap purchased from each supplier is subject to inspection.

(d) For each furan warm box mold or core making line in a new or existing iron and steel foundry, you shall use a binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation as determined by the material safety data sheet. This requirement does not apply to the resin portion of the binder system.

(e) For each scrap preheater at an existing iron and steel foundry, you shall meet either of the following requirements, or, as an alternative, you may meet the VOHAP emissions limit in sub. (1)(a)9.:

1. You shall install, operate and maintain a gas-fired preheater where the flame directly contacts the scrap charged.

2. You shall charge only material that is subject to and in compliance with the scrap certification requirement in par. (b).

(f) For each scrap preheater at a new iron and steel foundry, you shall charge only material that is subject to, and in compliance with, the scrap certification requirement in par. (b). As an alternative to this requirement, you may meet the VOHAP emissions limit in sub. (1)(a)9.

(3) WHAT ARE MY OPERATION AND MAINTENANCE REQUIREMENTS? (a) As required by s. NR 460.05(4)(a)1., you shall always operate and maintain your iron and steel foundry, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subchapter.

(b) You shall prepare, and operate at all times according to, a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to an emissions limit in sub. (1)(a). Your operation and maintenance plan shall also include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. The operation and maintenance plan is subject to approval by the department and shall contain all of the following elements:

1. Monthly inspections of the equipment that is important to the performance of the total capture system, such as pressure sensors, dampers and damper switches. The inspections shall include observations of the physical appearance of the equipment, such as the presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork and fan erosion. The operation and maintenance plan shall also include requirements to repair the defect or deficiency as soon as practicable.

2. Operating limits for each capture system for an emissions source subject to an emissions limit or standard for VOHAP or TEA in sub. (1)(a)§. to 11. You shall establish the operating limits according to all of the following requirements:

a. You shall select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you shall use appropriate operating limit parameters that indicate the level of the ventilation draft and damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations.

Appropriate operating limit parameters for ventilation draft include volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage or static pressure. Any parameter for damper position setting may be used that indicates the duct damper position related to the fully open setting.

b. For each operating limit parameter selected in subd. 2.a., you shall designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, you shall designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate, for example the operating limits with one furnace melting or 2 melting, as applicable to your plant.

c. You shall include documentation in your plan to support your selection of the operating limits established for your capture system. This documentation shall include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of s. NR 463.26(1)(a) and the data used to establish the value or setting for the parameter for each of your process configurations.

3. A preventive maintenance plan for each control device, including a preventive maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

4. A site-specific monitoring plan for each bag leak detection system. For each bag leak detection system that operates on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance",

EPA-454/R-98-015, incorporated by reference in s. NR 484.06(4)(c). The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The baghouse monitoring plan is subject to approval by the department and shall address all of the following items:

- a. Installation of the bag leak detection system.
- b. Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established.
- c. Operation of the bag leak detection system including quality assurance procedures.
- d. How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list.
- e. How the bag leak detection system output will be recorded and stored.

5. A corrective action plan for each baghouse. The plan shall include the requirement that, in the event a bag leak detection system alarm is triggered, you shall initiate corrective action to determine the cause of the alarm within one hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm and complete the corrective action as soon as practicable. Corrective actions taken may include any of the following:

- a. Inspecting the baghouse for air leaks, torn or broken bags or filter media or any other condition that may cause an increase in emissions.
- b. Sealing off defective bags or filter media.
- c. Replacing defective bags or filter media or otherwise repairing the control device.
- d. Sealing off a defective baghouse compartment.
- e. Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system.
- f. Making process changes.
- g. Shutting down the process producing the PM emissions.

6. Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless you determine the mold vent gases either are not ignitable, ignite automatically or cannot be ignited due to accessibility or safety issues. You shall document and maintain records of the determination of ignitability, accessibility and safety. The determination may encompass multiple casting patterns provided the

castings utilize similar sand-to-metal ratios, binder formulations and coating materials. The determination of ignitability shall be based on observations of the mold vents within 5 minutes of pouring, and the flame shall be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of the determination made under this subdivision, both of the following apply:

a. Mold vents that ignite more than 75% of the time without the presence of an auxiliary ignition source are considered to ignite automatically.

b. Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25% of the time are considered to be not ignitable.

NR 463.24 General compliance requirements. (1) WHAT ARE MY GENERAL REQUIREMENTS FOR COMPLYING WITH THIS SUBCHAPTER? (a) You shall be in compliance with the emissions limitations, work practice standards and operation and maintenance requirements in this subchapter at all times, except during periods of startup, shutdown or malfunction.

(b) During the period between the compliance date specified for your iron and steel foundry in s. NR 463.21(4) and the date when applicable operating limits have been established during the initial performance test, you shall maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You shall develop a written startup, shutdown and malfunction plan according to the provisions in s. NR 460.05(4)(c). The startup, shutdown and malfunction plan shall also specify what constitutes a shutdown of a cupola and how to determine that operating conditions are normal following startup of a cupola.

(2) **WHAT PARTS OF THE GENERAL PROVISIONS APPLY TO ME?** You shall comply with the applicable general provisions requirements in ch. NR 460. Appendix EEEEE in ch. NR 460 shows which parts of the general provisions in ch. NR 460 apply to you.

NR 463.25 Initial compliance requirements. (1) BY WHAT DATE MUST I CONDUCT INITIAL PERFORMANCE TESTS OR OTHER INITIAL COMPLIANCE DEMONSTRATIONS? (a) As required by s. NR 460.06(1)(b), you shall conduct a performance test no later than 180 calendar days after the compliance date that is

specified in s. NR 463.21(4) for your iron and steel foundry to demonstrate initial compliance with each emission limitation in s. NR 463.23(1) that applies to you.

(b) For each work practice standard in s. NR 463.23(2) and each operation and maintenance requirement in s. NR 463.23(3) that applies to you where initial compliance is not demonstrated using a performance test, you shall demonstrate initial compliance no later than 30 calendar days after the compliance date that is specified for your iron and steel foundry in s. NR 463.21(4).

(c) If you commenced construction or reconstruction between December 23, 2002 and April 22, 2004, you shall demonstrate initial compliance with either the proposed emissions limit or the promulgated emissions limit no later than October 19, 2004 or no later than 180 calendar days after startup of the source, whichever is later, according to s. NR 460.06(1)(c).

(d) If you commenced construction or reconstruction between December 23, 2002 and April 22, 2004, and you chose to comply with the proposed emissions limit when demonstrating initial compliance, you shall conduct a second performance test to demonstrate compliance with the promulgated emissions limit by October 19, 2007 or after startup of the source, whichever is later, according to s. NR 460.06(1)(c).

(2) WHEN MUST I CONDUCT SUBSEQUENT PERFORMANCE TESTS? (a) You shall conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP and TEA emissions limitations in s. NR 463.23(1) for your iron and steel foundry no less frequently than every 5 years. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance.

(b) You shall conduct subsequent performance tests to demonstrate compliance with the opacity limit in s. NR 463.23(1) (a)7. for your iron and steel foundry no less frequently than once every 6 months.

(3) WHAT TEST METHODS AND OTHER PROCEDURES MUST I USE TO DEMONSTRATE INITIAL COMPLIANCE WITH THE EMISSION LIMITATIONS? You shall conduct each performance test that applies to your iron and steel foundry according to the requirements in s. NR 460.06(4)(a) and the following conditions, as applicable:

(a) *Particulate matter*. To determine compliance with the applicable emission limit for PM in s. NR 463.23(1)(a)1. to 6. for a metal melting furnace, scrap preheater, pouring station or pouring area, you shall use the following test methods and procedures:

1. Determine the concentration of PM according to the test methods in 40 CFR part 60, appendix A, incorporated by reference in s. NR 484.04(13), that are specified in subd. 1.a. to e.:

a. Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites shall be located at the outlet of the control device, or at the outlet of the emission source if no control device is present, prior to any releases to the atmosphere.

b. Method 2, 2A, 2C, 2D, 2F or 2G to determine the volumetric flow rate of the stack gas.

c. Method 3, 3A or 3B to determine the dry molecular weight of the stack gas.

d. Method 4 to determine the moisture content of the stack gas.

e. Method 5, 5B, 5D, 5F or 5I, as applicable, to determine the PM concentration. The PM concentration is determined using only the front-half, probe rinse and filter, of the PM catch.

2. Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. A minimum of 3 valid test runs are needed to comprise a performance test.

3. For cupola metal melting furnaces, sample only during times when the cupola is on blast.

4. For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.

5. For scrap preheaters, sample only when scrap is being preheated.

(b) *Total metal HAP*. To determine compliance with the applicable emission limit for total metal HAP in s. NR 463.23(1)(a)1. to 6. for a metal melting furnace, scrap preheater, pouring station, or pouring area, you shall use the following test methods and procedures:

1. Determine the concentration of total metal HAP according to the test methods in 40 CFR part 60, appendix A, incorporated by reference in s. NR 484.04(13), that are specified in subd. 1.a. to e.:

a. Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites shall be located at the outlet of the control device, or at the outlet of the emissions source if no control device is present, prior to any releases to the atmosphere.

b. Method 2, 2A, 2C, 2D, 2F or 2G to determine the volumetric flow rate of the stack gas.

c. Method 3, 3A or 3B to determine the dry molecular weight of the stack gas.

d. Method 4 to determine the moisture content of the stack gas.

e. Method 29 to determine the total metal HAP concentration.

2. Collect a minimum sample volume of 60 dscf of gas during each total metal HAP sampling run. A minimum of 3 valid test runs are needed to comprise a performance test.

3. For cupola metal melting furnaces, sample only during times when the cupola is on blast.

4. For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.

5. For scrap preheaters, sample only when scrap is being preheated.

(c) *Fugitive emissions.* To determine compliance with the opacity limit in s. NR 463.23(1)(a)7. for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, you shall use the following test method and procedures:

1. Using a certified observer, conduct each opacity test according to the requirements in EPA Method 9 in 40 CFR part 60, appendix A, incorporated by reference in s. NR 484.04(13) and the requirements in s. NR 460.05(6)(d).

2. Conduct each test such that the opacity observations overlap with the PM performance tests.

(d) *Volatile organic HAP emissions from cupola furnaces and scrap preheaters.* To determine compliance with the applicable VOHAP emissions limit in s. NR 463.23(1)(a)8. for a cupola metal melting furnace or in s. NR 463.23(1)(a)9. for a scrap preheater, you shall use the following test methods and procedures:

1. Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A, incorporated by reference in s. NR 484.04(13), that are specified in subd.1.a. to e.:

a. Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites shall be located at the outlet of the control device, or at the outlet of the emissions source if no control device is present, prior to any releases to the atmosphere.

b. Method 2, 2A, 2C, 2D, 2F or 2G to determine the volumetric flow rate of the stack gas.

c. Method 3, 3A or 3B to determine the dry molecular weight of the stack gas.

d. Method 4 to determine the moisture content of the stack gas.

e. Method 18 to determine the VOHAP concentration. Alternatively, you may use Method 25 to determine the concentration of total gaseous nonmethane organics (TGNMO) or Method 25A to determine the concentration of total organic compounds (TOC), using hexane as the calibration gas.

2. Determine the average VOHAP, TGNMO or TOC concentration using a minimum of 3 valid test runs. Each test run shall include a minimum of 60 continuous operating minutes.

3. For a cupola metal melting furnace, correct the measured concentration of VOHAP, TGNMO or TOC for oxygen content in the gas stream using Equation 1:

$$C_{\text{VOHAP},10\%O_2} = C_{\text{VOHAP}} \left(\frac{10.9\%}{20.9\% - \%O_2} \right) \quad \text{Equation 1}$$

where:

C_{VOHAP} is the concentration of VOHAP in ppmv as measured by Method 18 in 40 CFR part 60, appendix A, incorporated by reference in s. NR 484.04(16) or the concentration of TGNMO or TOC in ppmv as hexane as measured by Method 25 or 25A in 40 CFR part 60, appendix A, incorporated by reference in s. NR 484.04(19) or (20)

$\%O_2$ is the oxygen concentration in gas stream, percent by volume (dry basis)

4. For a cupola metal melting furnace, measure the combustion zone temperature of the combustion device with the CPMS required in s. NR 463.26(1)(d) during each sampling run in 15-minute intervals. Determine and record the 15-minute average of the 3 runs.

(e) *Volatile organic HAP emissions from automated pallet cooling lines or automated shakeout lines.* To determine compliance with the VOHAP emissions limit in s. NR 463.23(1)(a)10. for automated pallet cooling lines or automated shakeout lines you shall use either the procedures in subds. 1. and 3. or subds. 2. and 3.

1. To demonstrate compliance by direct measurement of total hydrocarbons, a surrogate for VOHAP, use all of the following procedures:

a. Using the VOC CEMS required in s. NR 463.26(1)(g), measure and record the concentration of total hydrocarbons, as hexane, for 180 continuous operating minutes. You shall measure emissions at the outlet of the

control device, or at the outlet of the emissions source if no control device is present, prior to any releases to the atmosphere.

b. Reduce the monitoring data to hourly averages as specified in s. NR 460.07(7)(b).

c. Compute and record the 3-hour average of the monitoring data.

2. To demonstrate compliance by establishing a site-specific TOC emissions limit that is correlated to the VOHAP emissions limit, use the following procedures:

a. Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A, incorporated by reference in s. NR 484.04(13), that are specified in this subdivision.

1) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites shall be located at the outlet of the control device, or at the outlet of the emissions source if no control device is present, prior to any releases to the atmosphere.

2) Method 2, 2A, 2C, 2D, 2F or 2G to determine the volumetric flow rate of the stack gas.

3) Method 3, 3A or 3B to determine the dry molecular weight of the stack gas.

4) Method 4 to determine the moisture content of the stack gas.

5) Method 18 to determine the VOHAP concentration. Alternatively, you may use Method 25 to determine the concentration of TGNMO using hexane as the calibration gas.

b. Using the CEMS required in s. NR 463.26(1)(g), measure and record the concentration of total hydrocarbons, as hexane, during each of the Method 18 or Method 25 sampling runs. You shall measure emissions at the outlet of the control device, or at the outlet of the emissions source if no control device is present, prior to any releases to the atmosphere.

c. Calculate the average VOHAP or TGNMO concentration for the source test as the arithmetic average of the concentrations measured for the individual test runs and determine the average concentration of total hydrocarbon, as hexane, as measured by the CEMS during all test runs.

d. Calculate the site-specific VOC emissions limit using Equation 2:

$$VOC_{\text{limit}} = 20 \times \frac{C_{\text{VOHAP, avg}}}{C_{\text{CEM}}} \quad \text{Equation 2}$$

where: