



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
Air Quality Division

Semiannual Compliance Report

NESHAP for Iron and Steel Foundry Area Sources

40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880 – 40 CFR 63.10906)

Instructions

1. Who Must Complete This Form?

On January 2, 2008, the United States Environmental Protection Agency (USEPA) promulgated a National Emissions Standard for Hazardous Air Pollutants (NESHAP) for iron and steel foundries. Iron and steel foundries that meet the definition of an area source are required to submit Semiannual Compliance Reports to the USEPA and the Michigan Department of Environment, Great Lakes, and Energy (EGLE).

2. Definitions

An **iron and steel foundry** is a facility or a portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel, and pours the resulting molten metal into molds to produce final or near final shape products for sale. Research and development facilities, operations that only produce non-commercial castings, and operations associated with nonferrous metal production are not included in this definition.

An **area source** has the potential to emit less than 10 tons per year of a single hazardous air pollutant (HAP) and less than 25 tons per year of any combination of HAPs. If a facility emits more than these amounts, they are “*major sources*” and not subject to this Rule.

An **existing source** means that the foundry startup or reconstruction occurred *on or before* September 17, 2007.

A **new source** means the initial startup of the foundry or reconstruction occurred *after* September 17, 2007.

Reconstruction means that the fixed capital costs exceed 50 percent of the fixed capital cost that would be required to construct a comparable new foundry.

Small and Large Foundries. If your foundry is an existing source, determine your metal melt production for the calendar year 2008. If the production is equal to or less than 20,000 tons, then your foundry is considered *small*. If production is more than 20,000 tons, it is considered *large*. If your foundry is a new source and the annual melt capacity is equal to or less than 10,000 tons, then your foundry is considered *small*. If it is more than 10,000 tons, then your foundry is considered *large*.

Annual metal melt production means the total quantity of metal charged to all metal melting furnaces at the foundry in a given calendar year.

Annual metal melt capacity depends on whether or not the furnace(s) are permitted by EGLE, Air Quality Division. If not, then the capacity is determined by assuming the furnaces are operating at 8,760 hours per year. If they are permitted, then the capacity is determined by the maximum permitted production rate calculated on an annual basis. If the permit limits the operating hours of the furnaces, then the permitted hours are used in annualizing the maximum permitted metal production rate.

3. What Sections of the Form Must Be Completed and When?

All small and large foundries must complete the Semiannual Compliance Report, including the facility section, Parts A, B, and C, and the certification section of this form. The Excess Emissions and Continuous Monitoring System (CMS) performance report and summary report (pages 8-14) must be submitted by large new foundries or the large existing foundries that have installed a bag leak detection system to a baghouse as an alternative to the baghouse inspection requirements in 40 CFR 63.10897(a)(1). For your convenience, the relevant sections of the Code of Federal Regulations (CFR) are referenced throughout the form. To obtain copies of the CFRs, go to www.Michigan.gov/Air, select “Clean Air Assistance” and then “Iron and Steel Foundry Area Sources” under “Federal Regulations.” There is also a fact sheet entitled “Federal Hazardous Air Pollutant Standard: Iron and Steel Foundry Area Sources” at this web page which provides an overview of the regulation.

Existing small and large foundries must submit semiannual annual reports every six months (by July 30 for the calendar half January 1 through June 30, and by January 30 for the calendar half July 1 through December 31). New small and large foundries are required to submit their first report six months after startup. Semiannual reports are then submitted every six months after the initial submittal according to the same schedule for existing foundries.

4. Where Do I Send the Completed Form?

In accordance with the September 10, 2020 technology review, beginning on March 9, 2021, you must submit all subsequent compliance, notification and semiannual reports to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI). You must also submit reports to the appropriate Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division district office (see Attachment A). Send the form to the attention of the “AQD District Supervisor.”

Attachment A – Air Quality Division District Office Contact Information

District	Contact Information
Bay City District	<p>401 Ketchum Street, Suite B Bay City, MI 48708-5430</p> <p>Contact: 989-798-0782 or 989-439-2282</p> <p>Counties: Arenac, Bay, Clare, Gladwin, Huron, Iosco, Isabella, Midland, Ogemaw, Saginaw, Sanilac, and Tuscola</p>
Cadillac District	<p>120 West Chapin Street Cadillac, MI 49601-2158</p> <p>Contact: 989-798-0872 or 231-492-5954</p> <p>Counties: Benzie, Grand Traverse, Kalkaska, Lake, Leelanau, Manistee, Mason, Missaukee, Osceola, and Wexford</p>
Detroit District	<p>Cadillac Place, Suite 2-300 3058 West Grand Blvd. Detroit, MI 48202-6058</p> <p>Contact: 313-456-4681</p> <p>Counties: Wayne</p>
Gaylord District	<p>2100 West M-32, Gaylord, MI 49735-9282</p> <p>Contact: 989-798-0872, or 231-492-5954</p> <p>Counties: Alcona, Alpena, Antrim, Charlevoix, Cheboygan, Crawford, Emmet, Montmorency, Oscoda, Otsego, Presque Isle, and Roscommon</p>
Grand Rapids District	<p>350 Ottawa Avenue NW, Unit 10 Grand Rapids, MI 49503-2316</p> <p>Contact: 616-356-0500 (Receptionist), 616-279-8021 or 616-540-1136</p> <p>Counties: Barry, Ionia, Kent, Mecosta, Montcalm, Muskegon, Newaygo, Oceana, and Ottawa</p>
Jackson District	<p>State Office Building, 4th Floor 301 East Louis Glick Highway Jackson, MI 49201-1535</p> <p>Contact: 517-513-9638, 517-416-5992 or 517-416-4631</p> <p>Counties: Hillsdale, Jackson, Lenawee, Monroe, and Washtenaw</p>

District	Contact Information
Kalamazoo District	<p>7953 Adobe Road, Kalamazoo, MI 49009-5026</p> <p>Contact: 269-243-0954 or 269-312-2535</p> <p>Counties: Allegan, Berrien, Branch, Calhoun, Cass, Kalamazoo, St. Joseph, and Van Buren</p>
Lansing District	<p>P.O. Box 30242 Lansing, MI 48909-7742</p> <p>Contact: 517-294-9288 or 517-275-0439</p> <p>Counties: Clinton, Eaton, Genesee, Gratiot, Ingham, Lapeer, Livingston, and Shiawassee</p>
Marquette District	<p>1504 West Washington Street Marquette, MI 49855-3118</p> <p>Contact: 906-241-0086 or 906-202-0013</p> <p>Counties: All counties in the Upper Peninsula</p>
Warren District	<p>27700 Donald Court, Warren, MI 48092-2793</p> <p>Contact: 586-412-6145 or 586-606-2572</p> <p>Counties: Macomb, Oakland, and St. Clair</p>

Semiannual Compliance Report
NESHAP for Iron and Steel Foundry Area Sources
40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880 – 40 CFR 63.10906)

Please review the instructions before completing this form.

Facility Information

Company Name: _____

Company Phone: _____

Mailing Address: _____

City: _____ State: _____ ZIP Code: _____

Owner/Operator Contact Name and Title: _____

Owner Phone: _____

Owner Mailing Address (if different than company): _____

City: _____ State: _____ ZIP Code: _____

Owner/Operator Email: _____

Facility Name (if different than company): _____

Facility Phone: _____

Facility Address (if different than company): _____

City: _____ State: _____ ZIP Code: _____

State Registration Number (SRN) if known: _____

Please check whether the person listed above is the owner or operator of the area source:

Owner Operator

Identify the beginning and ending dates of the six-month reporting period (Either January 1 through June 30, or July 1 through December 31).

Beginning: _____ Ending: _____

Please check whether the area source is a new or existing source (see instructions for definitions):

New Source (Date of startup: _____) Existing Source

If an existing source, metal melt production for the previous calendar year: _____ (tons)

Check one: Small Foundry ($\leq 10,000$) Large Foundry ($> 10,000$)

Part A – Management Practices for Metallic Scrap

1. During the reporting period, were there any periods during which the facility operated out of compliance with the metallic scrap management requirements? [40 CFR 63.10885(a)]

Yes No

If yes, summarize the deviation(s) and indicate the dates and times when the facility operated out of compliance with the metallic scrap management requirements and explain what corrective actions were taken.

Part B – Management Practices for Mercury Scrap

1. During the reporting period, were there any periods during which the facility operated out of compliance with the mercury scrap management requirements? [40 CFR 63.10885(b)]

Yes No

If yes, summarize the deviation(s) and indicate the dates and times when the facility operated out of compliance with the mercury scrap management requirements and corrective actions taken.

2. Indicate below which mercury management option(s) the facility is using.

- Site-specific plan for mercury switches Approved mercury program
- Scrap that does not contain motor vehicle scrap Specialty metal scarp

3. During the reporting period did the facility conduct periodic inspections or take other actions of corroboration as required under [40 CFR 63.10885(b)(1)(ii)(c) or 40 CFR 63.10885(b)(2)(iv)(C)]?

- No N/A – The facility does not melt motor vehicle scrap
- Yes - Indicate the dates and times when the facility conducted inspections or other actions of corroboration.

4. A. Provide the following information for the reporting period: number of switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed an estimate of the percent of mercury switches recovered, and identify which mercury management option applies to each scrap provider, contact, or shipment (Attach records as needed).

B. Were all removed mercury switches recycled at an RCRA permitted facility as required under [40 CFR 63.10885(b)(1)(iv)]?

- Yes No
- N/A – The facility does not operate under a site-specific plan for mercury switches

Part C – Management Practices for Binder Formulations

1. During the reporting period, were there any periods during which the facility operated out of compliance with the management practices for binder formulations? According to Subpart ZZZZZ, the facility shall not use a binder formulation that contains methanol as a specific ingredient of the catalyst formulation for a furfuryl alcohol warm box mold or core making line. [40 CFR 63.10886]

Yes No

If yes, summarize the deviation(s) and indicate the dates and times when the facility operated out of compliance with the management practices for binder formulations and corrective actions taken.

Certification

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete.

Signature of "Responsible Official*"

Date

Name of "Responsible Official*": _____

Title of "Responsible Official*": _____

*A "Responsible Official" can be:

- The president, vice-president, secretary, or treasurer of the company who owns the facility.
- The owner of the facility.
- The facility engineer or supervisor.
- A government official if the plant is owned by the federal, state city or county government.
- A ranking military officer if the plant is located on a military base.

In accordance with the September 10, 2020, technology review, beginning on March 9, 2021, you must submit all subsequent compliance, notification and semiannual reports to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI). You must also submit reports to the appropriate Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division district office (see Attachment A). Send the form to the attention of the "AQD District Supervisor."

Excess Emissions and Continuous Monitoring System (CMS) Performance Report And Summary Report

A. Excess Emissions

1. Have any excess emissions or exceedances of a monitored parameter occurred during this reporting period? [40 CFR 63.10(e)(3)(v)]
 Yes No (If no, go to B.1.)
2. If you answered yes, complete Table 1 on the next page **for each period** of excess emissions and/or parameter monitoring exceedances, as defined in the relevant standard(s), that occurred **during** startups, shutdowns, and/or malfunctions of your affected source, **or during periods other than** startups, shutdowns, and/or malfunctions of your affected source. (**Go to B.1.**) [40 CFR 63.10(c)(7)-(11)]

Table 1. Excess Emissions and/or Parameter Monitoring Exceedances

Note: Use a separate line for each period of excess emissions and/or parameter monitoring exceedances of your affected source.

Excess Emissions	Parameter Monitoring Exceedance	During Startup	During Shutdown	During Malfunction	During Another Period	Start Date (mm/dd/yyyy)	Completion Date (mm/dd/yyyy)	Nature and Cause of any Malfunction (if known)	Corrective Action Taken or Preventive Measures Adopted
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

B. Continuous Monitoring System Performance

1. Has a CMS been inoperative (except for zero/low-level and high-level checks), out of control (as defined in [40 CFR 63.8(c)(7)(i)], repaired, or adjusted during this reporting period? [40 CFR 63.10(e)(3)(v)]

Yes No (If no, go to B.3.)

Note: A CMS is out of control if (a) the zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or (b) the CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or (c) the COMMS CD exceeds two times the limit in the applicable performance specification in the relevant standard. **(40 CFR 63.8(c)(7)(i))**

When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out-of-control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out-of-control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part. **(40 CFR 63.8(c)(7)(ii))**

2. If you answered yes, complete Table 2 on the next page **for each period** a CMS was out of control, repaired, or adjusted: **(40 CFR 63.10(c)(5)-(6), (10)-(12), 40 CFR 63.8(c)(8))**
3. Indicate the total process operating time during the reporting period. **(40 CFR 63.10(c)(13))**

Total process operating time (days): _____

Summary Report: Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance

Note: One summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). **(40 CFR 63.10(e)(3)(vi))**

A. Report Date and Submittal Reporting Period

Indicate the reporting period covered by this submittal and the date of this summary report. [40 CFR 63.10(e)(3)(vi)(C), and (M)]

Reporting period beginning date (mm/dd/yyyy): _____

Reporting period ending date: (mm/dd/yyyy): _____

Summary report date (mm/dd/yyyy): _____

B. Process Description and Monitoring Equipment Information

Complete the following process description and monitoring equipment information table *for each affected source process unit*: **(40 CFR 63.10(e)(3)(vi)(B), (D), (E), (F), (G), and (H))**

Total operating time affected source during the reporting period (days): _____

Process Unit Name: _____

Process Unit Description:

Emission and/or operating parameter limitations specified in the relevant standard(s):

Table 3. Monitoring Equipment Information

Type	Latest Certification or Audit Date (mm/dd/yyyy)	Manufacturer	Model	HAPs Monitored

C. Emission Data Summary

Complete the following emission data summary **for each affected source**: [40 CFR 63.10(e)(3)(vi)(I)]

Total duration of excess emissions/parameter exceedances (minutes for opacity, hours for gases)

Opacity (minutes): _____

Gases (hours): _____

Total operating time of affected source during the reporting period (days): _____

Percent of total source operating time during which excess emissions/parameter exceedances occurred (percent): _____

Summary of causes of excess emissions/parameter exceedances (percent of total duration by cause):

Cause	Percent
Startup/shutdown	%
Control equipment problems	%
Process problems	%
Other known causes	%
Other unknown causes	%
TOTAL	100%

D. CMS Performance Summary

Complete the following CMS performance summary **for each affected source**: (40 CFR 63.10(e)(3)(vi)(J))

Total duration of CMS downtime (minutes for opacity, hours for gases)

Opacity (minutes): _____

Gases (hours): _____

Total operating time of affected source during the reporting period (days): _____

Percent of total source operating time during which CMS were down (percent): _____

Summary of causes of CMS downtime (percent of downtime by cause):

Cause	Percent
Monitoring equipment malfunctions	%
Nonmonitoring equipment malfunctions	%
Quality assurance/quality control calibrations	%
Other known causes	%
Other unknown causes	%
TOTAL	100%

E. CMS, Process, or Control Changes

1. Have you made any changes in CMS, processes, or controls since the last reporting period?
(40 CFR 63.10(e)(3)(vi)(K))

Yes No (If no, go to Certification)

1. If you answered yes, please describe the changes below, and then go to **Certification**.

Changes in CMS, processes, or controls since the last reporting period

Certification

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete.

Print or type the name and title of the “Responsible Official*” for the plant:

Signature of “Responsible Official*”

Date

Name of “Responsible Official*”: _____

Title of “Responsible Official*”: _____

*A “Responsible Official” can be:

- The president, vice-president, secretary, or treasurer of the company who owns the facility.
- The owner of the facility.
- The facility engineer or supervisor.
- A government official if the plant is owned by the federal, state city or county government.
- A ranking military officer if the plant is located on a military base.

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People with disabilities may request this material in an alternate format by emailing EGLE-Accessibility@Michigan.gov or calling 800-662-9278.

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