

**Iowa Department of Natural Resources  
Title V Operating Permit**

**Name of Permitted Facility: SSAB Iowa, Inc.**

**Facility Location: 1770 Bill Sharp Blvd.**

**Muscatine, Iowa 52761**

**Air Quality Operating Permit Number: 07-TV-004R2**

**Expiration Date: April 19, 2023**

**Permit Renewal Application Deadline: October 19, 2022**

**EIQ Number: 92-6869**

**Facility File Number: 70-08-002**

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**Responsible Official**

**Name: Mr. Andy Bramstedt**

**Title: General Manager**

**Mailing Address: 1770 Bill Sharp Blvd.**

**Muscatine, IA 52761**

**Phone #: (563) 381-5300**

**Permit Contact Person for the Facility**

**Name: Thomas S. Sanicola**

**Title: Senior Environmental Manager**

**Mailing Address: 1770 Bill Sharp Blvd.**

**Muscatine, IA 52761**

**Phone #: (563) 381-5584**

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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

**For the Director of the Department of Natural Resources**

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Lori Hanson, Supervisor of Air Operating Permits Section

Date

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### Abbreviations

acfm.....actual cubic feet per minute  
BACT.....best available control technology  
BHP.....brake horsepower  
CFH.....cubic feet per hour  
cf.....cubic feet  
CFR.....Code of Federal Regulation  
COMS.....continuous opacity monitoring system  
DEC.....direct-shell evacuation control  
dscfm.....dry standard cubic feet per minute  
EAF.....electric arc furnace  
EIQ.....emissions inventory questionnaire  
°F.....degrees Fahrenheit  
gr./dscf.....grains per dry standard cubic foot  
HHV.....higher heating value  
IAC.....Iowa Administrative Code  
IDNR.....Iowa Department of Natural Resources  
lb/hr.....pounds per hour  
lb/MMBtu.....pounds per million British thermal units  
LMF.....ladle metallurgy furnace  
MMCF.....million cubic feet  
MVAC.....motor vehicle air conditioner  
NSPS.....new source performance standard  
ppmv.....parts per million by volume  
PSD.....Prevention of Significant Deterioration  
scfh.....standard cubic feet per hour  
scfm.....standard cubic feet per minute  
SDS.....Safety Data Sheet  
TPY.....tons per year  
TPH.....tons per hour  
USEPA.....United States Environmental Protection Agency

### Pollutants

Be.....beryllium  
CO.....carbon monoxide  
F.....fluoride  
HAP.....hazardous air pollutant  
NO<sub>x</sub>.....nitrogen oxides  
PM.....particulate matter (also referred to as TSP)  
PM<sub>10</sub>.....particulate matter ten microns and less in diameter  
SO<sub>2</sub>.....sulfur dioxide  
VOC.....volatile organic compound

# I. Facility Description and Equipment List

Facility Name: SSAB Iowa, Inc.-Muscatine

Permit Number: 07-TV-004R2

Facility Description: Steel Mill (SIC 3312)

## Equipment List

### A. EAF/LMF Meltshop Stacks

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
1A	1.1	Scrap Preheat Shell	94-A-548-P10
	1.2	Electric Arc Furnace Melting Shell	
	1.3	Ladle Metallurgy Furnace (LMF)	
	11	Alloy Bins Transfer	94-A-558-S1
1B	1.1	Scrap Preheat Shell	09-A-736-P5
	1.2	Electric Arc Furnace Melting Shell	

### B. LMF Meltshop Roof Monitor

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
2	2	Caster Mold	94-A-549-S1
	7	Tundish Dump	94-A-554-S1
	15	Ladle Dryer	94-A-562-S4
	16.1	Ladle Preheater	94-A-563-S5
	16.2	Ladle Preheater	
	16.3	Ladle Preheater	
	16.4	Ladle Preheater	
	17.1	Tundish Dryer	94-A-564-S4
	17.2	Tundish Dryer	
	17.3	Tundish Dryer	
	18.1	Tundish Preheater	94-A-565-S3
	18.2	Tundish Preheater	

### C. Carbon Storage Silo

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
4	4	Carbon Storage Silo	15-A-577

D. Storage Silos

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>IDNR Construction Permit Number</b>
12A	12A	Lime Storage Silo	15-A-559
12B	12B	Lime Storage Silo	15-A-560
12C	12C	Dolomite Storage Silo	15-A-561
12D	12D	Dolomite Storage Silo	15-A-562
39A	39A	Carbon Storage Silo	15-A-575
39B	39B	Carbon Storage Silo	15-A-576

E. Roadways

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>IDNR Construction Permit Number</b>
8	8	Slag Haul Roadway	94-A-555-P4
9	9	General Plant Roadway	94-A-556-P3

F. Generators

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>IDNR Construction Permit Number</b>
21	21	Rolling Mill Standby Generator	96-A-1138
22	22	Continuous Caster Standby Generator	96-A-1139
23	23	Melt Shop Standby Generator	96-A-1140
26	26	Emergency Lighting Generator	98-A-973
31	31	Rolling Mill Emergency Generator #2	01-A-1228
33	33	Portable Generator	01-A-1230

G. Miscellaneous Equipment

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>IDNR Construction Permit Number</b>
6	6	Oxy-fuel Caster Torch	94-A-553-S3
10	10	Steel Scrap Cutting Operations-4 Torches	94-A-557-S1
13	13	Slab Reheating Furnace	94-A-560-P5
14	14.1	Temperature Retention Unit	94-A-561-S4
	14.2	Temperature Retention Unit	
19	19	Outside Alloy Storage Bins	95-A-775
20	20	Alloy & Desulfurization System	N/A
25	25	Reheat Furnace Emergency Pump	01-A-1229
27	27	Torch Cutting Table	99-A-362-S2
34	34	Ink Stencil Machine	02-A-789
35	35	Quality Control Hand Scarfing	08-A-518-P
36A	36	Vacuum Tank Degasser (VTD)	06-A-790
36B			06-A-791
37	37	VTD Steam Generator #1	06-A-792-S1
38	38	VTD Steam Generator #2	10-A-147
41	41	VTD Steam Generator #3	10-A-146
40	40	Cooling Tower	10-A-063
24	24	Melt Shop Emergency Pump (< 400 BHp)	N/A

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**Insignificant Activities Equipment List**

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<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
29	Maintenance Welding
30	Misc. Hand Operated Torches
32	Parts Washers
35	Portable Heaters (<10MMBtu)
50	Stencil Operations

## II. Plant-Wide Conditions

Facility Name: SSAB Iowa, Inc.

Permit Number: 07-TV-004R2

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

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### Permit Duration

The term of this permit is: Five (5) years

Commencing on: April 20, 2018

Ending on: April 19, 2023

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

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### Plant-Wide Emission Limits

*The atmospheric emissions from the plant as a whole shall not exceed the following:*

Pollutant: Opacity

Emission Limit: 0% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 95-A-775

DNR PSD Permit 94-A-557-S1

DNR PSD Permit 94-A-555-P4

DNR PSD Permit 94-A-556-P3

567 IAC 23.3(2)"c"

<sup>(1)</sup> Limit at the plant property line.

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*Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:*

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

SO<sub>2</sub>: 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

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## NESHAP

The Electric Arc Furnace (EAF) is subject to NESHAP Subpart A (General Provisions, 40 CFR §63.1-40 CFR §63.15) and NESHAP Subpart YYYYYY-National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities.

Authority for Requirement: 40 CFR Part 63 Subpart YYYYYY  
567 IAC 23.1(4)"dy"

The Electric Generators and Emergency Pumps are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR 63 Subpart ZZZZ  
567 IAC 23.1(4)"cz"

## NSPS

The Electric Arc Furnace (EAF) is subject to NSPS Subpart AAa-Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983.

Authority for Requirement: 40 CFR Part 60 Subpart AAa  
567 IAC 23.1(2)"ww"

The VTD Steam Generators are subject to NSPS Subpart Dc – Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units and Subpart A – General Provisions.

Authority for Requirement: 40 CFR Part 60 Subpart Dc  
567 IAC 23.1(2)"lll"

### **Facility Maintained Fugitive Dust Control Plan** (for 0% opacity at the property line)

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*The data pertaining to the plan must be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with these sources of emissions.*

Authority for Requirement: 567 IAC 22.108(3)

## **Facility Periodic Opacity Monitoring**

The following Emission Points will be checked, as described below, weekly; Emission Points 2, 4, 6, 13, 14, 27, 39A, 39B.

On a weekly basis, SSAB will have a certified smoke reader conduct a Method 22 visible emissions check on the entire site, checking emission points when the associated emission units are operating at or near full capacity. If there are visible emissions, the smoke reader will identify the source of the emissions and conduct a standard EPA Method 9 observation on that particular source. The Method 9 result will be compared to the particulate opacity limit applicable to the source. If an opacity exceeding the limit for the source is observed, it would be considered a violation and corrective action will be taken as soon as possible, but no later than eight hours from the time of the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately two-hour intervals throughout the day. If all observation tests for the week have been unsuccessful due to weather, an observation shall be made the next operating day when weather permits.

All opacity observations and any resulting actions shall be recorded and the records maintained for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

### III. Emission Point-Specific Conditions

Facility Name: SSAB Iowa, Inc.-Muscatine.  
 Permit Number: **07-TV-004R2**

#### Emission Point ID Number: See Table: EAF/LMF Melt Shop

#### Associated Equipment

Associated Emission Unit ID Numbers: See Table: EAF/LMF Melt Shop  
 Emissions Control Equipment ID Number: See Table: EAF/LMF Melt Shop  
 Emissions Control Equipment Description: See Table: EAF/LMF Melt Shop

Table: EAF/LMF Melt Shop

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Emissions Control Equipment ID No.	Emissions Control Equipment Description	Control Measure	Raw Material	Rated Capacity
1A	1.1	Scrap Preheat Shell	CE 1A	Negative Pressure Pulsejet Baghouse	5 OXY-Fuel Burners: (3- Carbon Injection, 2- Lime/Dolomite Injection, Rated Capacity: 68.3 MMBtu/hr) (CE-1C)	Scrap Steel and Alloys, Natural Gas and Oxygen	200 TPH Steel and Alloys, 154,000 scfh Oxygen and 154,000 scfh Natural Gas
	1.2	Electric Arc Furnace Melting Shell				Scrap Steel and Alloys, Natural Gas and Oxygen	200 TPH Steel and Alloys, 154,000 scfh Oxygen and 154,000 scfh Natural Gas
	1.3	Ladle Metallurgy Furnace				Steel	200 TPH
	11	Alloy Bins Transfer				Alloy	200 TPH

Table: EAF/LMF Melt Shop (cont.)

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Emissions Control Equipment ID No.	Emissions Control Equipment Description	Raw Material	Rated Capacity
1B	1.1	Scrap Preheat Shell	CE 1B	Reverse Air Baghouse	Scrap Steel and Alloys, Natural Gas and Oxygen	200 TPH Steel and Alloys, 154,000 scfh Oxygen and 154,000 scfh Natural Gas
	1.2	Electric Arc Furnace Melting Shell			Scrap Steel and Alloys, Natural Gas and Oxygen	200 TPH Steel and Alloys, 154,000 scfh Oxygen and 154,000 scfh Natural Gas

### Applicable Requirements

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

**BACT Emission Limits**

Pollutant: Opacity

Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: 40 CFR 60.272a(b)  
567 IAC 23.1(2)"ww"  
567 IAC 23.3(2)"d"

Pollutant: Opacity

Emission Limit(s): 3%

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM) <sup>(2)</sup>

Emission Limit(s): 0.335 lb/ton <sup>(3)</sup> and 293.5 TPY <sup>(4)</sup>

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: PM<sub>10</sub> <sup>(2)</sup>

Emission Limit(s): 0.335 lb/ton <sup>(3)</sup> and 293.5 TPY <sup>(4)</sup>

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Volatile Organic Compounds (VOC) <sup>(2)</sup>  
Emission Limit(s): 0.18 lb/ton <sup>(3)</sup> and 157.7 TPY <sup>(4)</sup>  
Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Carbon Monoxide (CO) <sup>(2)</sup>  
Emission Limit(s): 1.93 lb/ton <sup>(3)</sup> and 1,690.7 TPY <sup>(4)</sup>  
Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Lead (Pb) <sup>(2)</sup>  
Emission Limit(s): 0.00055 lb/ton <sup>(3)</sup> and 0.49 TPY <sup>(4)</sup>  
Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Fluoride (F)  
Emission Limit(s): 2.81 lb/hr <sup>(4)</sup> and 12.31 TPY <sup>(4)</sup>  
Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

<sup>(1)</sup> Emissions from the dust handling system for material from the EAF/LMF baghouse. **This limit only applies when the dust is being removed from the baghouse.**

<sup>(2)</sup> The referenced emission limits are average values for one complete heat cycle (45 minutes tap to tap) or a multiple thereof. This does not include tons per year and opacity emission limits.

<sup>(3)</sup> Refers to pounds of pollutant per ton of steel produced for both stacks (EP 1A and 1B) combined.

<sup>(4)</sup> Standard is a 12-month rolling total for both stacks (EP 1A and 1B) combined.

## Other Emission Limits

Pollutant: Opacity  
Emission Limit(s): 3%  
Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)  
40 CFR 60.272a(2)  
567 IAC 23.1(2)"ww"  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>  
Emission Limit(s): 67.0 lb/hr <sup>(4)</sup>  
Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Particulate Matter (PM)  
Emission Limit(s): 0.0052 gr/dscf  
Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)  
40 CFR 60.272a(a)(1)  
567 IAC 23.1(2)"ww"

40 CFR 63.10686 (b)(1)  
567 IAC 23.1(4)"dy"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 613.2 TPY <sup>(1)</sup>, 0.70 lb/ton <sup>(2)(3)</sup>, 140 lb/hr <sup>(4)</sup>

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 700.8 TPY <sup>(1)</sup>, 0.80 lb/ton <sup>(2)(3)</sup>, 160 lb/hr <sup>(4)</sup>

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 386 lb/hr <sup>(4)</sup>

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Lead (Pb)

Emission Limit(s): 0.086 lb/hr <sup>(4)</sup>

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

Pollutant: Beryllium (Be)

Emission Limit(s): 0.0004 TPY <sup>(1)</sup> and  $9.1 \times 10^{-5}$  lb/hr <sup>(4)</sup>

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

<sup>(1)</sup> Standard is a 12-month rolling total for both stacks (EP 1A and 1B) combined.

<sup>(2)</sup> The referenced emission limits are average values for one complete heat cycle (45 minutes tap to tap) or a multiple thereof. This does not include tons per year and opacity emission limits.

<sup>(3)</sup> Refers to pounds of pollutant per ton of steel produced. The emission rates listed are for both stacks, EP 1A and EP 1B, combined.

<sup>(4)</sup> Standard is expressed as the average of 3 runs. The emission rates listed are for both stacks, EP 1A and EP 1B, combined.

## For Emission Unit 11

Emissions from this unit are fugitive within the EAF meltshop and are captured by the canopy roof hood and vented to the EAF baghouse. The fugitive emissions are included in the emissions from the EAF baghouse.

Authority for Requirement: DNR PSD Construction Permit 94-A-558-S1

## NSPS and NESHAP

The emission units in this permit are subject to Subparts A (40 CFR §60.1 – 40 CFR §63.19; *General Provisions*) and AAa (40 CFR §60.270a – 40 CFR §60.276a; *Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed after August 7, 1983*) of the New Source Performance Standards (NSPS).

Authority for Requirement: 40 CFR Part 60 Subpart AAa  
567 IAC 23.1(2)"ww"

This facility (plant number 70-08-002) is subject to Subparts A (40 CFR §63.1 – 40 CFR §63.15; *General Provisions*) and YYYYYY (40 CFR §63.10680 – 40 CFR §63.10692; *National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities*) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart YYYYYY  
567 IAC 23.1(4)"dy"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

Operating limits for this emission unit shall be:

- A. Per 40 CFR §60.274a(b), the owner or operator shall monitor the furnace static pressure once per shift.
- B. Per 40 CFR §60.274a(b), the owner or operator shall monitor the flow rate by either
  - a. Monitoring the control system fan motor amperes and damper position on a once per shift basis or
  - b. Install, calibrate, and maintain a monitoring device that continuously records the volumetric flowrate through each separately ducted hood. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flowrate monitoring device(s) shall have an accuracy of plus or minus ten percent (+/- 10%) over its normal operating range and shall be calibrated according to the manufacturer's instructions. The Department may require the owner or operator or subcontractor to demonstrate the accuracy of the monitoring device(s) relative to 40 CFR 60, Appendix A, Methods 1 and 2.
- C. Per 40 CFR 60.274a(d), the owner or operator shall perform monthly operational status inspections of the equipment that is important to the performance of the capture system (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.
- D. Per 40 CFR §60.274a(f), the owner or operator shall install, calibrate, and maintain a

monitoring device that allows the pressure in the free space inside the Electric Arc Furnace (EAF) to be monitored. The monitoring device may be installed in any appropriate location in the EAF or Direct Evacuation Control (DEC) duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of plus or minus five mm of water (+/- 5 mm H<sub>2</sub>O) gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

- E. Operation at a furnace static pressure that exceeds the value established under 40 CFR §60.274a(g) and either operation of control system fan motor amperes at values exceeding plus or minus fifteen percent (+/- 15%) of the value established under 40 CFR §60.274a(c) or operation at flow rates lower than those established under 40 CFR §60.274a(c) will be considered by the Department to be unacceptable operation and maintenance of the facility. Operation at such values shall be recorded and maintained by the owner for a period of at least five (5) years following the date of recording and shall be submitted to the Administrator annually.
- F. Per 40 CFR §63.7700, the owner or operator shall maintain a scrap management plan at the plant.
- G. The owner or operator shall maintain records of scrap materials processed, by specification designation and quantity, at the plant.
- H. The owner or operator shall maintain a baghouse operation and maintenance plan at the facility.
- I. An analysis of each sulfur-containing material used in the process shall be performed. Annual summaries of the results shall be submitted to the Department at the end of each calendar year.
- J. All other applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 – 40 CFR §60.19) and AAa (40 CFR §60.270a – 40 CFR §60.276a) not specifically listed in this permit.
- K. All other applicable work practice, operation, and maintenance requirements set forth in NESHAP Subparts A (40 CFR §63.1 – 40 CFR §63.15) and YYYYYY (40 CFR §63.10680 – 40 CFR §63.10692) not specifically listed in this permit.
- L. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
  - a. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition 14.L.(2).
  - b. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
  - c. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).

### **Operating Condition Monitoring and Recordkeeping**

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department.

Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. Per 40 CFR §60.274a(a), a log of the furnace static pressure.
- B. Per 40 CFR §60.274a(a), a log of either:
  - a. The control system fan motor amperes and damper position or
  - b. The records of the volumetric flowrate through each separately ducted hood from the monitoring device(s).
- C. Per 40 CFR §60.274a(a), a log of the monthly operational status inspections of the equipment that is important to the performance of the capture system along with any deficiencies noted and the maintenance performed.
- D. Per 40 CFR §60.274a(a), a log of the results of from the EAF monitoring device required in Condition 14.D.
- E. A log of the hours of operation for each baghouse scenario listed in Emission Point Characteristic, Note 5 (shown below). The owner or operator shall use the results of the most recent required compliance test (test must include front and back half) to calculate emissions due to the various scenarios and track the actual PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions of these units for each calendar year.
- F. All other applicable monitoring and recordkeeping requirements set forth in NSPS Subparts A (40 CFR §60.1 – 40 CFR §60.19) and AAa (40 CFR §60.270a – 40 CFR §60.276a) not specifically listed in this permit.
- G. All other applicable monitoring and recordkeeping requirements set forth in NESHAP Subparts A (40 CFR §63.1 – 40 CFR §63.15) and YYYYYY (40 CFR §63.10680 – 40 CFR §63.10692) not specifically listed in this permit.
- H. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain a record containing the information required in Operating Limits, Condition L (shown above) of this permit and that record shall be retained by the owner or operator for a period of five (5) years after the projects (Project Number 14-078 & 14-378) is completed.

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

### **Emission Point Characteristics**

The following emission units are connected to the control equipment CE 1A & CE 1B and emission points EP 1A & EP 1B:

- Scrap Preheat Shell (EU 1.1),
- Melting Shell (EU 1.2), and
- Ladle Metallurgy Furnace (LMF, EU 1.3)
- Alloy Bin Transfer (EU 11)

#### NOTES:

- 1) The rated capacity of 200 tons of melted steel/hr is the combined capacity of EUs 1.1 and 1.2 at a tap-to-tap time of forty-five (45) minutes.

- 2) EUs 1.1 and 1.2 are housed in a closed shop and operated under a skirted canopy which is ducted to the post combustion chamber and then to the baghouse.
- 3) EU 1.3 consists of two (2) stations with three (3) hoods and is ducted to the baghouse.
- 4) Emissions from the alloy bins and alloy transfer are included in the emissions from the baghouse controlling EAF emissions.
- 5) The baghouses (CE 1A and CE 1B) and associated (fans) with EP 1A and EP 1B are allowed to operate under the following scenarios:
  - (a) CE 1A with 3 fans and CE 1B with 3 fans
  - (b) CE 1A with 3 fans and CE 1B with 2 fans
  - (c) CE 1A with 2 fans and CE 1B with 3 fans
  - (d) CE 1A with 1 fan and CE 1B with 3 fans
  - (e) CE 1A with 3 fans and CE 1B not operating

These emission points shall conform to the conditions specified in Table: EAF/LMF Meltshop Stacks

Table: EAF/LMF Meltshop Stacks			Stack Characteristics				
Emission Point Number	Emission Unit Number	Construction Permit #	Height (feet from ground)	Diameter (inches)	Exhaust Flowrate (acfm)	Exhaust Temp. (°F)	Stack Characteristics
1.A	1.1	94-A-548-P10	152	228	296,000 to 887,000 <sup>(1)</sup>	150	Vertical, Unobstructed
	1.2						
	1.3						
	11						
1.B	1.1	09-A-736-P5	101.33	180 x 1308	0 to 800,000 <sup>(1)</sup>	180	Vertical, Unobstructed
	1.2						

<sup>(1)</sup> The flowrate is variable as zero (0) to three (3) fans can operate on this emission point.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)

## **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

See Facility Periodic Opacity Monitoring under Plant-Wide Conditions.

### **Stack Testing:**

Pollutant – Sulfur Dioxide

Stack Test to be Completed: Quarterly <sup>(1)</sup> <sup>(2)</sup>

Test Method – 40 CFR 60, Appendix A, Method 6 or 6C

Authority for Requirement - Administrative Consent Order Issued by EPA 3/3/2005 in In the Matter Of IPSCO Steel, Inc.

Pollutant – Nitrogen Oxides

Stack Test to be Completed: Quarterly <sup>(1)</sup> <sup>(2)</sup>

Test Method – 40 CFR 60, Appendix A, Method 7E

Authority for Requirement - Administrative Consent Order Issued by EPA 3/3/2005 in In the Matter Of IPSCO Steel, Inc.

- (1) The facility is required to conduct simultaneous stack testing for EP1A and EP1B.
- (2) Quarterly testing as required per “*Administrative Compliance Order on Consent*” entered into by the United States Environmental Protection Agency (EPA) and IPSCO Steel Inc. (IPSCO) on March 4, 2005 (Docket No.: CAA-07-2005-0124).

*The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

## Continuous Emission Monitoring

The following continuous emission monitoring requirements apply to these emission points and the associated emission units and control equipment:

A. The following monitoring systems are required to demonstrate compliance with the NSPS and Best Available Control Technology (BACT) requirements listed in this permit:

o *Opacity:*

Per 40 CFR §60.273a, the owner or operator shall either:

- In accordance with 40 CFR §60.273a(a), the owner or operator shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere

or

- In accordance with 40 CFR §60.273a(c), the owner or operator shall:
  - (1) Perform visible emissions observations by a certified visible emission observer at least once per day for at least three (3) periods of six (6) minutes each when the furnace is operating in the melting and refining period. All visible emission observations shall be conducted in accordance with Method 9. The owner shall maintain records of exceedances of the control device opacity for at least five (5) years following the date of the measurement. For the purposes of these reports, exceedances are defined as all six (6) minute periods during which the average opacity is 3% or greater. Written reports of the above shall be submitted to the Administrator annually.

and

- (2) Install a bag leak detection system and continuously operate it according to 40 CFR §60.273a(e).

Authority for Requirement: DNR PSD Construction Permit 94-A-548-P10 (1A)  
DNR PSD Construction Permit 09-A-736-P5 (1B)  
40 CFR 60.273a(e)  
567 IAC 23.1(2)“ww”

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

***See Appendix A - Site Specific Monitoring Plan that fulfills the CAM requirements.***

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 2-LMF Meltshop Roof Monitor**

### Associated Equipment

Associated Emission Unit ID Numbers: 2, 7, 15, 16.1, 16.2, 16.3, 16.4, 17.1, 17.2, 17.3, 18.1, & 18.2

Emissions Control Equipment ID Number: 2.01, 15.01

Emissions Control Equipment Description: Spray Chamber, Thermal Destruction System (TDS)

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Emission Unit vented through this Emission Point: 2

Emission Unit Description: Caster Mold

Raw Material/Fuel: Steel

Rated Capacity: 200 TPH

### **Applicable Requirements-Caster Mold**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission unit shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 94-A-549-S1  
567 IAC 23.3(2)"d"

<sup>(1)</sup> The 10% opacity limit applies to the LMF Meltshop Roof Monitor.

Pollutant: Particulate Matter (PM)

BACT Emission Limit(s): 0.40 lb/hr and 1.76 TPY

Authority for Requirement: DNR PSD Permit 94-A-549-S1

Pollutant: PM<sub>10</sub>

BACT Emission Limit(s): 0.40 lb/hr and 1.76 TPY

Authority for Requirement: DNR PSD Permit 94-A-549-S1

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Emission Unit vented through this Emission Point: 7

Emission Unit Description: Tundish Dump

Raw Material/Fuel: Refractory

Rated Capacity: 200 TPH

## **Applicable Requirements -Tundish Dump**

### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission unit shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 94-A-554-S1  
567 IAC 23.3(2)"d"

<sup>(1)</sup> The 10% opacity limit applies to the LMF Meltshop Roof Monitor.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.11 lb/hr <sup>(2)</sup> and 0.48 TPY

Authority for Requirement: DNR PSD Permit 94-A-554-S1

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.11 lb/hr <sup>(2)</sup> and 0.48 TPY

Authority for Requirement: DNR PSD Permit 94-A-554-S1

<sup>(2)</sup> BACT limit.

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Emission Unit vented through this Emission Point: 15

Emission Unit Description: Ladle Dryer

Raw Material/Fuel: Natural Gas

Rated Capacity: 17.8 MMBtu/hr

## **Applicable Requirements-Ladle Dryer**

### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission unit shall not exceed the levels specified below.*

Pollutant: Opacity

BACT Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 94-A-562-S4  
567 IAC 23.3(2)"d"

<sup>(1)</sup> This opacity limit applies to the LMF meltshop roof monitor, from which emissions from this unit exhaust.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

A. This unit shall only be supplied natural gas to fuel the combustion at this unit.

B. The maximum natural gas usage for the burner(s) in the dryer shall not exceed 11,730 standard cubic feet per hour.

- C. The maximum natural gas usage for the burner(s) in the Thermal Destruction System (TDS) shall not exceed 5,670 standard cubic feet per hour.
- D. The maximum amount of refractory material used shall not exceed 13,000 tons in any twelve (12) month rolling period, rolled monthly.
- E. The resin content of the refractory brick shall not exceed 5% by weight.
- F. The owner or operator shall not reline ladles more than 307 times in any twelve (12) month period, rolled monthly.

Control equipment parameters:

- A. The temperature in the TDS must be maintained above a minimum of 1500 °F during the operation of the dryer.

### **Reporting & Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. At the end of each working day, record the amount of natural gas consumed by the burner(s) in the dryer over the previous day.
- B. At the end of each working day, record the amount of natural gas consumed by the burner(s) in the TDS over the previous day.
- C. Install, maintain and continuously operate a strip chart recorder or other continuous recording device to monitor the temperature in the TDS.
- D. At the end of each month of operation, record the amount of refractory material used over the previous month. At the end of each month, record the amount of refractory material that was used over the previous twelve (12) months.
- E. MSDS/SDS or other documentation from the refractory manufacturer showing the resin content of the refractory brick shall be maintained according to the requirements of 29 CFR 1910.1200 or other suitable schedule approved by OSHA.
- F. At the end of each calendar month, record the number of ladles that were relined over the previous month. At the end of each calendar month, record the total number of ladles that were relined over the previous twelve (12) months.

Authority for Requirement: DNR PSD Permit 94-A-562-S4

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Emission Unit vented through this Emission Point: See Table: Ladle Preheaters  
 Emission Unit Description: See Table: Ladle Preheaters  
 Raw Material/Fuel: See Table: Ladle Preheaters  
 Rated Capacity: See Table: Ladle Preheaters

Table: Ladle Preheaters

<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>
16.1	Ladle Preheater	Natural Gas	12 MMBtu/hr
16.2	Ladle Preheater	Natural Gas	12 MMBtu/hr
16.3	Ladle Preheater	Natural Gas	12 MMBtu/hr
16.4	Ladle Preheater	Natural Gas	12 MMBtu/hr

### **Applicable Requirements-Ladle Preheaters**

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from these emission units shall not exceed the levels specified below.*

The following emission limits apply to each of the four preheaters.

Pollutant: Opacity

BACT Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 94-A-563-S5  
 567 IAC 23.3(2)"d"

<sup>(1)</sup> This opacity limit applies to the LMF meltshop roof monitor, from which emissions from this unit exhaust.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- A. These units shall only be supplied natural gas as a fuel.
- B. The maximum natural gas usage for each burner shall not exceed 11,730 standard cubic feet per hour.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. At the end of each working day, record the number of hours the ladle preheaters operated over the previous day.
- B. At the end of each working day, record the amount of natural gas consumed by the ladle preheaters over the previous day.
- C. Monthly, calculate the hourly average natural gas consumption rate for each day by dividing the amount of gas consumed on that day by the number of hours the emission unit operated on that day.

Authority for Requirement: DNR PSD Permit 94-A-563-S5

Emission Unit vented through this Emission Point: See Table: Tundish Dryers

Emission Unit Description: See Table: Tundish Dryers

Raw Material/Fuel: See Table: Tundish Dryers

Rated Capacity: See Table: Tundish Dryers

Table: Tundish Dryers

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
17.1	Tundish Dryer	Natural Gas	6 MMBtu/hr
17.2	Tundish Dryer	Natural Gas	6 MMBtu/hr
17.3	Tundish Dryer	Natural Gas	6 MMBtu/hr

**Applicable Requirements-Tundish Dryers**

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from these emission units shall not exceed the levels specified below.*

Pollutant: Opacity

BACT Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 94-A-564-S4  
567 IAC 23.3(2)"d"

<sup>(1)</sup> The 10% opacity limit applies to the LMF meltshop roof monitor, through which the emissions from these units exhaust. The LMF meltshop units are the LMF, the caster mold, the tundish dump, the ladle dryer, the ladle preheaters, the tundish dryers, and the tundish preheaters. The LMF Meltshop roof monitor units include the tundish dryers.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process Throughput**

- A. These units shall only be supplied natural gas as a fuel.
- B. The maximum natural gas usage for each burner shall not exceed 3,000 standard cubic feet per hour.
- C. The tundish dryers shall be used in the caster maintenance bay and the LMF meltshop.
- D. The materials used in the lining process for the tundish shall contain no VOC's.

#### **Reporting & Recordkeeping**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. At the end of each working day, record the number of hours the tundish dryers operated over the previous day.
- B. At the end of each working day, record the amount of natural gas consumed by the tundish dryers over the previous day.
- C. Monthly, calculate the hourly average natural gas consumption rate for each day by dividing the amount of gas consumed on that day by the number of hours the emission unit operated on that day. The monthly calculations for a given month shall be performed no later than one week after the end of the month.
- D. Within 10 days of operating a tundish dryer in a location other than the caster maintenance bay or the LMF meltshop, the owner/operator must submit written notification to the Compliance Section and Field Office 6 of the Department. This notification shall include the location in which the tundish dryer was operated, the date and time operation in this location was initiated, and the duration of operation (if operation in this location has ended) or the expected duration of operation (if operation in this location is ongoing). If the Department identifies exceedances of the National Ambient Air Quality Standards (NAAQS) or any applicable PSD increment value, the owner or operator shall meet with the Department and cooperate in resolution of the identified issues.
- E. MSDS/SDS for all materials used in the lining process for the tundish shall be maintained on site for review.

Authority for Requirement: DNR PSD Permit 94-A-564-S4

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**Emission Point ID Number: 2**Associated Equipment

Emission Unit vented through this Emission Point: See Table: Tundish Preheaters

Emission Unit Description: See Table: Tundish Preheaters

Raw Material/Fuel: See Table: Tundish Preheaters

Rated Capacity: See Table: Tundish Preheaters

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Table: Tundish Preheaters

<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>
18.1	Tundish Preheater	Natural Gas	12.6 MMBtu/hr
18.2	Tundish Preheater	Natural Gas	12.6 MMBtu/hr

**Applicable Requirements-Tundish Preheaters****Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from these emission units shall not exceed the levels specified below.*

Pollutant: Opacity

BACT Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 94-A-565-S3  
567 IAC 23.3(2)"d"

<sup>(1)</sup> The 10% opacity limit applies to the LMF roof monitor from which the emissions from this unit exhaust.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- A. This unit shall only be supplied with natural gas as a fuel.
- B. The maximum natural gas usage for each burner shall not exceed 12,366 standard cubic feet per hour.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. At the end of each working day, record the number of hours the tundish preheaters operated over the previous day.
- B. At the end of each working day, record the amount of natural gas consumed by the tundish preheaters over the previous day.
- C. Monthly, calculate the hourly average natural gas consumption rate for each day by dividing the amount of gas consumed on that day by the number of hours the emission unit operated on that day. The monthly calculations for a given month shall be performed no later than one week after the end of each month.

Authority for Requirement: DNR PSD Permit 94-A-565-S3

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

The emissions from these units vent through the LMF Meltshop Roof Monitor.

Authority for Requirement: DNR PSD Permits 94-A-549-S1, 94-A-554-S1, 94-A-562-S4, 94-A-563-S5, 94-A-564-S4 and 94-A-565-S3.

**Monitoring Requirements-Emission Point 2**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

See Facility Periodic Opacity Monitoring under Plant-Wide Conditions.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: 4

### Associated Equipment

Associated Emission Unit ID Number: See Table: Carbon Storage Silo

Table: Carbon Storage Silo

Emission Point Number	Associated Emission Unit Number	Control Equipment Number	Control Equipment Description	Emission Unit Description	Raw Material	Rated Capacity (ft <sup>3</sup> )
4	4	CE-4	Bin Vent Filters	Carbon Storage Silo	Carbon	4,889

### Applicable Requirements

#### Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Emission Point Number	Associated Emission Unit Number	Opacity Limit	PM Limit (each emission point)	Authority for Requirement (Construction Permit No.)
4	4	40% <sup>(1)</sup> <sup>(2)</sup>	0.05 tons/yr. 0.1 gr/dscf <sup>(3)</sup>	15-A-577

<sup>(1)</sup> An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> Authority for Requirement: 567 IAC 23.3(2)"d"

<sup>(3)</sup> Authority for Requirement: 567 IAC 23.3(2)"a"

#### Operational Limits & Requirements

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

Operating limits for this emission unit shall be:

- A. Carbon Storage Silos EU-4 shall not store more than 30,660 tons of carbon per rolling 12-month period.
- B. The Bin Vent Filters (CE-4) shall be operated and maintained according to manufacturer recommendations and specifications.

**Operating Condition Monitoring and Recordkeeping**

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall record the amount of carbon, in tons, stored in EU-4 each month. The owner or operator shall calculate and record the rolling 12-month total amount of carbon, in tons, stored in EU-4.
- B. The owner or operator shall maintain a record of all maintenance and inspection activities performed on the Bin Vent Filters (CE-4).

Authority for Requirement: DNR Construction Permits 15-A-577

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Table: Emission Point Characteristics

Emission Point Number	Associated Emission Unit Number	Construction Permit No. (Authority for Requirement)	Stack Characteristics				Discharge Style
			Height (feet)	Diameter (inches)	Exhaust Flowrate (scfm)	Exhaust Temp. (°F)	
4	4	15-A-577	75	14	250	Ambient	Horizontal

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: 12A, 12B, 12C, 12D, 39A & 39B

### Associated Equipment

Associated Emission Unit ID Numbers: See Table: Storage Silos

Table: Storage Silos

Emission Point Number	Associated Emission Unit Number	Control Equipment Number	Control Equipment Description	Emission Unit Description	Raw Material	Rated Capacity (ft <sup>3</sup> )
12A	12A	CE-12A	Bin Vent Filter	Lime Storage Silo	Lime	4,889
12B	12B	CE-12B	Bin Vent Filter	Lime Storage Silo	Lime	4,889
12C	12C	CE-12C	Bin Vent Filter	Dolomite Storage Silo	Dolomite	4,889
12D	12D	CE-12D	Bin Vent Filter	Dolomite Storage Silo	Dolomite	4,889
39A	39A	CE-39A	Bin Vent Filters	Carbon Storage Silo	Carbon	4,889
39B	39B	CE-39B	Bin Vent Filters	Carbon Storage Silo	Carbon	4,889

### Applicable Requirements

#### Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Emission Point Number	Associated Emission Unit Number	Opacity Limit	PM Limit (each emission point)	Authority for Requirement (Construction Permit No.)
12A	12A	40% <sup>(1)</sup> <sup>(2)</sup>	0.29 tons/yr. 0.1 gr/dscf <sup>(3)</sup>	15-A-559
12B	12B			15-A-560
12C	12C			15-A-561
12D	12D			15-A-562
39A	39A			15-A-575
39B	39B			15-A-576

<sup>(1)</sup> An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> Authority for Requirement: 567 IAC 23.3(2)"d"

<sup>(3)</sup> Authority for Requirement: 567 IAC 23.3(2)"a"

## **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Limits**

Operating limits for this emission unit shall be:

- A. Lime and Dolomite Storage Silos EU-12A, EU-12B, EU-12C, and EU-12D shall not store more than 67,500 tons of lime and dolomite per rolling 12-month period.
- B. The Bin Vent Filters (CE-12C) shall be operated and maintained according to manufacturer recommendations and specifications.

Authority for Requirement: DNR Construction Permits 15-A-559, 15-A-560, 15-A-561, & 15-A-562

- A. Carbon Storage Silos EU-39A and EU-39B shall not store more than 30,660 tons of carbon per rolling 12-month period.
- B. The Bin Vent Filters (CE-39A and CE-39B) shall be operated and maintained according to manufacturer recommendations and specifications.

Authority for Requirement: DNR Construction Permits 15-A-575 & 15-A-576

### **Operating Condition Monitoring and Recordkeeping**

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall record the amount of lime and dolomite, in tons, stored in EU-12A, EU-12B, EU-12C, and EU-12D each month. The owner or operator shall calculate and record the rolling 12-month total amount of lime and dolomite, in tons, stored in EU-12A, EU-12B, EU-12C, and EU-12D.
- B. The owner or operator shall maintain a record of all maintenance and inspection activities performed on the Bin Vent Filters (CE-12A, CE-12B, CE-12C, and CE-12D).

Authority for Requirement: DNR Construction Permits 15-A-559, 15-A-560, 15-A-561, & 15-A-562

- A. The owner or operator shall record the amount of carbon, in tons, stored in EU-39A and EU-39B each month. The owner or operator shall calculate and record the rolling 12-month total amount of carbon, in tons, stored in EU-39A and EU-39B.
- B. The owner or operator shall maintain a record of all maintenance and inspection activities performed on the Bin Vent Filters (CE-39A and CE-39B).

Authority for Requirement: DNR Construction Permits 15-A-575 & 15-A-576

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Table: Emission Point Characteristics

Emission Point Number	Associated Emission Unit Number	Construction Permit No. (Authority for Requirement)	Stack Characteristics				
			Height (feet)	Diameter (inches)	Exhaust Flowrate (scfm)	Exhaust Temp. (°F)	Discharge Style
12A	12A	15-A-559	36.5	14	1,530	Ambient	Horizontal
12B	12B	15-A-560	36.5	14	1,530	Ambient	Horizontal
12C	12C	15-A-561	36.5	14	1,530	Ambient	Horizontal
12D	12D	15-A-562	36.5	14	1,530	Ambient	Horizontal
39A	39A	15-A-575	36.5	14	1,530	Ambient	Horizontal
39B	39B	15-A-576	36.5	14	1,530	Ambient	Horizontal

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: See Table – Roadways

### Associated Equipment

Associated Emission Unit ID Numbers: See Table: Roadways

Table: Roadways

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Control Equipment Number	Control Equipment Description	Raw Material	Rated Capacity
8	8	Slag Haul Roadway	8.01	Crushed Stone	Unpaved Road	40 slag pot transfers/day
			8.02	Emulsion Spraying		
9	9	General Plant Roadways	9.01	Hard Surface Paving, Water Flushing, and Mechanical Sweeping	Paved Roadway	50.1 miles/day
			9.02			

## Applicable Requirements

### Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Table 1: Haul Road Emission Limits

Emission Point Number	Associated Emission Unit Number	Opacity Limit	PM <sub>10</sub> Limit		Additional Limits	Authority for Requirement (Construction Permit No.)
			Lb/hr	TPY		
8	8	0% <sup>(1)</sup> <sup>(2)</sup>	3.09	13.5	Work Practice <sup>(3)</sup>	94-A-555-P4
9	9	0% <sup>(1)</sup> <sup>(2)</sup>	1.84	8.05	Work Practice <sup>(4)</sup>	94-A-556-P3

<sup>(1)</sup> This opacity limit applies at the property line of the facility

<sup>(2)</sup> BACT Emission Limit.

<sup>(3)</sup> Best Available Control Technology (BACT) is a work practice that consists of the facility (plant number 70-08-002) doing daily water & periodic emulsion spraying. The facility is required to do the daily water & periodic emulsion spraying per manufacturer/distributor recommendations in order to maintain a minimum 80% control efficiency.

<sup>(4)</sup> Best Available Control Technology (BACT) is a work practice that consists of the facility (plant number 70-08-002) doing daily water flushing. The facility is also required to do water flushing followed mechanical sweeping once per week in order to maintain a minimum 80% control efficiency.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits (EP-8)**

Operating limits for this emission unit shall be:

- A. The slag haul roadway silt content shall not exceed 15.70%.
- B. Fugitive emissions of the slag haul roadway shall be controlled by daily water & emulsion spraying.
  - a. Water & emulsion spraying need not occur on any day that the haul road is not in use.
  - b. Water & emulsion spraying need not occur when a rain gauge located at the facility indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period.
  - c. Water & emulsion spraying will not be required on calendar days where the daily high temperature is below 35 degrees F.

Authority for Requirement: DNR Construction Permit 94-A-555-P4

#### **Operating Condition Monitoring (EP-8)**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. Record the frequency of (water and emulsion spraying) performed on the slag haul roadway. The facility shall keep a written record of any deviations from Operating Limits, Condition B (shown above) due to either suspended use of the haul road or weather conditions.

Authority for Requirement: DNR Construction Permit 94-A-555-P4

#### **Operating Limits (EP-9)**

Operating limits for this emission unit shall be:

- A. All general plant roadways at the facility (plant number 70-08-002) shall be paved.
- B. The general road surface silt loading shall not exceed 11.39 g/m<sup>2</sup>.
- C. All spills on the general road surface shall be cleaned up as soon as possible after the spill occurs.
- D. Fugitive emissions of paved general roads shall be controlled by completing daily water flushing. In addition, once per week water flushing followed by mechanical sweeping shall be conducted in order to meet a minimum of 80% overall control of emissions.
  - a. Sweeping and watering need not occur when a rain gauge located at the facility indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period.

- b. Sweeping and watering will not be required on calendar days where the daily high temperature is below 35 degrees F.
- c. If a facility has applied salt or sand for worker or driver safety the facility is not required to sweep or wash until the road has returned to driving conditions that no longer require the use of salt or sand.

**Operating Condition Monitoring (EP-9)**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. Record the frequency of cleaning performed on the general paved roadways. The facility shall keep a written record of any deviations from Operating Limits, Condition B (shown above) due to either suspended use of the general roads or weather conditions.
- B. Record the type of cleaning (i.e. vacuum sweeping, washing, etc.) performed on the general paved roads for each cleaning event.

Authority for Requirement: DNR PSD Permit 94-A-556-P3

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No   
For opacity at the property line

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*The data pertaining to the plan must be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with these sources of emissions.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: See Table: Generators**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Generators

Table: Generators

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (BHP)
21	21	Rolling Mill Standby Generator	Diesel	750
22	22	Continuous Caster Standby Generator	Diesel	2,168
23	23	Melt Shop Standby Generator	Diesel	1,482
26	26	Emergency Lighting Generator	Natural Gas	64
31	31	Rolling Mill Emergency Generator #2	Diesel	1,465
33	33	Portable Generator	Diesel	519

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Table: Generator Emission Limits

Emission Point Number	Associated Emission Unit Number	Opacity Limit	PM Limit	PM <sub>10</sub> Limit	SO <sub>2</sub> Limit	Authority for Requirement (Construction Permit No.)
21	21	10%	0.684 lb/hr & 0.1 gr/scf <sup>(1)</sup>	0.684 lb/hr & 0.1 gr/scf	1.14 lb/hr & 2.5 lb/MMBtu <sup>(2)</sup>	96-A-1138
22	22	10%	0.540 lb/hr & 0.1 gr/scf <sup>(1)</sup>	0.540 lb/hr & 0.1 gr/scf	3.02 lb/hr & 2.5 lb/MMBtu <sup>(2)</sup>	96-A-1139
23	23	10%	0.633 lb/hr & 0.1 gr/scf <sup>(1)</sup>	0.633 lb/hr & 0.1 gr/scf	0.19 lb/hr & 2.5 lb/MMBtu <sup>(2)</sup>	96-A-1140
26	26	10%	0.1 gr/scf	N/A	500 ppmv <sup>(3)</sup>	98-A-973
31	31	20%	5.50 lb/hr & 0.415 TPY	5.50 lb/hr & 0.415 TPY	2.5 lb/MMBtu <sup>(2)</sup>	01-A-1228
33	33	20%	2.82 lb/hr & 0.21 TPY	2.82 lb/hr & 0.21 TPY	2.5 lb/MMBtu <sup>(2)</sup>	01-A-1230

<sup>(1)</sup> Additional Authority for Requirement 567 IAC 23.3(2)

<sup>(2)</sup> Additional Authority for Requirement 567 IAC 23.3(3)"b"

<sup>(3)</sup> Additional Authority for Requirement 567 IAC 23.3(3)"e"

Table: Generator Emission Limits (Cont.)

Emission Point Number	Associated Emission Unit Number	NO <sub>x</sub> Limit	VOC Limit	CO Limit	Authority for Requirement (Construction Permit No.)
21	21	14.58 lb/hr	0.06 lb/hr	0.55 lb/hr	96-A-1138
22	22	71.48 lb/hr	0.97 lb/hr	10.03 lb/hr	96-A-1139
23	23	36.49 lb/hr	1.18 lb/hr	5.25 lb/hr	96-A-1140
26	26	N/A	N/A	N/A	98-A-973
31	31	32.15 lb/hr & 2.41 TPY	1.00 lb/hr & 0.075 TPY	8.5 lb/hr & 0.64 TPY	01-A-1228
33	33	16.0 lb/hr & 1.2 TPY	1.50 lb/hr & 0.12 TPY	9.65 lb/hr & 0.73 TPY	01-A-1230

NESHAP:

The emergency engines, EP-21, 22, 23, 31 & 33 are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(i) these emergency engines, located at a major source, are existing stationary RICE and constructed prior to December 19, 2002.

According to 63.6590(b)(3)(iii), an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ  
567 IAC 23.1(4)"cz"

The emergency engine, EP-26 is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) this spark ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of subpart ZZZZ that are applicable by October 19, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(j) for the oil analysis option to extend time frame of requirements.)
2. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

#### Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

#### Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

#### Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ  
567 IAC 23.1(4)"cz"

## **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below*

Table: Generators-Operational Limits & Requirements

<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Hours of Operation Limit</b>	<b>Process Throughput Limit</b>	<b>Reporting &amp; Recordkeeping<sup>(1)</sup></b>	<b>Authority for Requirements (DNR Construction Permit)</b>
21	21	These sources are limited to not more than 150 hr/yr of usage for periodic operational testing. Emergency use is limited to the amount of time in which normal electrical power service has been unavailable.	The diesel fuel burned in these units shall have a maximum sulfur content of 0.5 % by weight.	The operator shall maintain records on site of the hours of usage of these sources.	96-A-1138
22	22			A rolling twelve-month total (rolled monthly) of hours used shall be calculated and recorded monthly.	96-A-1139
23	23			The operator shall also maintain records of fuel sulfur content. <sup>(1)</sup>	96-A-1140

<sup>(1)</sup> Authority for requirement: 567 IAC 22.108(3)

Table: Generators-Operational Limits & Requirements (cont.)

<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Hours of Operation Limit</b>	<b>Process Throughput Limit</b>	<b>Reporting &amp; Recordkeeping<sup>(1)</sup></b>	<b>Authority for Requirements (DNR Construction Permit)</b>
26	26	This source is limited to not more than 150 hr/yr of usage for periodic operational testing. Emergency use is limited to the amount of time in which normal electrical power service has been unavailable.	This source is limited to the combustion of natural gas.	N/A	98-A-973
31	31	A. These units shall not operate more than a maximum of 150 hours per twelve (12) month period rolled monthly.	The fuel burned in these units shall be diesel fuel with a maximum sulfur content of 0.5 % by	A. A record of the time of each use of these units shall be recorded. This record shall include the time	01-A-1228

33	33	B. The operation of these units is limited to a short weekly test and emergency situations.	weight.	of startup, the duration of operation, and the reason for operation. B. A fuel certification or analysis shall be kept for each fuel delivery that shows the sulfur content of the fuel. C. A record of the rolling twelve-month total of the hours of usage, rolled monthly.	01-A-1230
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<sup>(1)</sup>All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

### **Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Table: Generators-Emission Point Characteristics

Emission Point Number	Emission Unit Number	Construction Permit Number (Authority for Requirement)	Height (ft.)	Diameter (inches)	Temperature (°F)	Flowrate	Discharge Style
21	21	96-A-1138	20	8	1,187	4,582 acfm	N/A
22	22	96-A-1139	20	12	923	13,384 acfm	N/A
23	23	96-A-1140	20	8	856	8,370 acfm	N/A
26	26	98-A-973	N/A	2.5	980	359 dscfm	N/A
31	31	01-A-1228	8	8	862	3040 scfm	Obstructed Vertical or Horizontal
33	33	01-A-1230	12.1	6	1025	960 scfm	Obstructed Vertical

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 6**

### Associated Equipment

Associated Emission Unit ID Number: 6

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Emission Unit vented through this Emission Point: 6  
Emission Unit Description: Oxy-Fuel Caster Torch  
Raw Material/Fuel: Natural Gas and Oxygen  
Rated Capacity: 2.02 MMBtu/hr

### **Applicable Requirements**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 94-A-553-S3  
567 IAC 23.3(2)"d"

<sup>(1)</sup> This opacity limit applies to the LMF Meltshop Monitor from which the emissions from this unit exhaust.

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- A. This unit shall only be supplied natural gas and oxygen to fuel the combustion of this unit.
- B. This unit is limited to the operation of two (2) primary burners and two (2) sample cutting burners at any one time.
- C. The maximum natural gas usage for the torch system shall not exceed 1,980 standard cubic feet per hour.
- D. The maximum number of cuts shall not exceed 245 cuts per day.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. At the end of each working day, record the number of cuts made over the previous day.

Authority for Requirement: DNR PSD Permit 94-A-553-S3

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

The emissions from this unit (E.P. #6) vent through the LMF Meltshop Monitor.

Authority for Requirement: DNR PSD Permit 94-A-553-S3

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

See Facility Periodic Opacity Monitoring under Plant-Wide Conditions.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 10**

Associated Equipment

Associated Emission Unit ID Numbers: 10

Emission Unit vented through this Emission Point: 10  
Emission Unit Description: Steel Scrap Cutting Operations (fugitive)  
Raw Material/Fuel: Oxy-Fuel  
Rated Capacity: Natural Gas 135 CFH, Oxygen 220 CFH for preheating and 1500 CFH for cutting

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 0% <sup>(1)</sup>  
Authority for Requirement: DNR PSD Permit 94-A-557-S1  
567 IAC 23.3(2)"d"

<sup>(1)</sup> This opacity limit applies at the property line of the facility

Pollutant: PM<sub>10</sub>  
BACT Emission Limit(s): 0.05 lb/hr and 0.23 TPY  
Authority for Requirement: DNR PSD Permit 94-A-557-S1

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No   
For opacity at the property line

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*The data pertaining to the plan must be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with these sources of emissions.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 13**

### Associated Equipment

Associated Emission Unit ID Numbers: 13

Emissions Control Equipment ID Number: CE 13

Emissions Control Equipment Description: Low NO<sub>x</sub>/CO Burners & Burner Internal Flue Gas Recirculation (CE 13)

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Emission Unit vented through this Emission Point: 13

Emission Unit Description: Slab Reheating Furnace (EU 13; 270 tons/hr w/burst of 400 tons/hr, 102 burners with total capacity of 387.6 MMBtu/hr)

Raw Material/Fuel: Natural Gas

Rated Capacity: 387.6 MMBtu/hr

### **Applicable Requirements**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

#### **BACT Emission Limits:**

Pollutant: Particulate Matter (PM)

Emission Limit(s): 6.96 TPY <sup>(1)</sup> and 0.0041 lb/MMBtu

Authority for Requirement: DNR PSD Permit 94-A-560-P5

Pollutant: PM<sub>10</sub>

Emission Limit(s): 6.96 TPY <sup>(1)</sup> and 0.0041 lb/MMBtu

Authority for Requirement: DNR PSD Permit 94-A-560-P5

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.37 TPY <sup>(1)</sup> and 0.0014 lb/MMBtu

Authority for Requirement: DNR PSD Permit 94-A-560-P5

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

BACT Emission Limit(s): 390.47 TPY <sup>(1)</sup> and 0.23 lb/MMBtu

Authority for Requirement: DNR PSD Permit 94-A-560-P5

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 9.17 TPY <sup>(1)</sup> and 0.0054 lb/MMBtu

Authority for Requirement: DNR PSD Permit 94-A-560-P5

Pollutant: Carbon Monoxide (CO)

BACT Emission Limit(s): 35.99 TPY <sup>(1)</sup> and 0.0212 lb/MMBtu

Authority for Requirement: DNR PSD Permit 94-A-560-P5

<sup>(1)</sup> Standard is a 12-month rolling total.

**Other Emission Limits:**

Pollutant: Opacity

Emission Limit(s): 10%

Authority for Requirement: DNR Construction Permit 94-A-560-P5  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

BACT Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 94-A-560-P5  
567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

BACT Emission Limit(s): 1.59 lb/hr

Authority for Requirement: DNR Construction Permit 94-A-560-P5

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 0.54 lb/hr

Authority for Requirement: DNR Construction Permit 94-A-560-P5

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

BACT Emission Limit(s): 89.15 lb/hr

Authority for Requirement: DNR Construction Permit 94-A-560-P5

Pollutant: Carbon Monoxide (CO)

BACT Emission Limit(s): 8.22 lb/hr

Authority for Requirement: DNR Construction Permit 94-A-560-P5

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

Operating limits for this emission unit shall be:

- A. This emission unit is limited to combusting only natural gas.
- B. The emission unit has the following heating zones and burners:

<b>Heating Zone</b>	<b>Number of Burners</b>	<b>Individual Burner Rating (MMBTU/hr)</b>
Top Preheat	14	4.57
Bottom Preheat (L)	17	8.10
Heating	14	7.32
Soaking	45	0.47
Additional Burners in 2000	12	5.20

## Reporting & Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. A totalizing meter, which cannot be reset, shall be installed in the natural gas supply line of the furnace. The quantity of natural gas combusted shall be recorded monthly.
- B. The hours of operation shall be recorded monthly.
- C. The capacity of the furnace shall be calculated each month by multiplying the HHV of the natural gas times the amount of natural gas consumed for that month and divided by the hours of operation.

Authority for Requirement: DNR Construction Permit 94-A-560-P5

### Emission Point Characteristics

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 111.83

Stack Opening, (inches, dia.): 118

Exhaust Flow Rate (scfm): 122,900

Exhaust Temperature (°F): 875

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 94-A-560-P5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

### Monitoring Requirements

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

See Facility Periodic Opacity Monitoring under Plant-Wide Conditions.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 14**

### Associated Equipment

Associated Emission Unit ID Numbers: 14.1, 14.2

Emissions Control Equipment ID Numbers: 14.11, 14.12, 14.21, 14.22

Emissions Control Equipment Description: Low NO<sub>x</sub> Burners, Internal Flue Gas Recirculation,

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Emission Unit vented through this Emission Point: 14.1

Emission Unit Description: Temperature Retention Unit

Raw Material/Fuel: Natural Gas

Rated Capacity: 12.95 MMBtu/hr

Emission Unit vented through this Emission Point: 14.2

Emission Unit Description: Temperature Retention Unit

Raw Material/Fuel: Natural Gas

Rated Capacity: 12.95 MMBtu/hr

### **Applicable Requirements**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

BACT Emission Limit(s): 10% <sup>(1)</sup>

Authority for Requirement: DNR PSD Permit 94-A-561-S4  
567 IAC 23.3(2)"d"

<sup>(1)</sup> This opacity limit applies to the Rolling Mill Building Roof Monitor from which the emissions from this unit exhaust.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- A. This unit shall only be supplied natural gas to fuel the combustion at this unit.
- B. The maximum natural gas usage for each burner shall not exceed 12,950 standard cubic feet per hour.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. At the end of each working day, record the number of hours the temperature retention units operated over the previous day.
- B. At the end of each working day, record the amount of natural gas consumed by the temperature retention units over the previous day.
- C. Monthly, calculate the hourly average natural gas consumption rate for each day by dividing the amount of gas consumed on that day by the number of hours the emission unit operated on that day. The monthly calculations for a given month shall be performed no later than one week after the end of the month.

Authority for Requirement: DNR PSD Permit 94-A-561-S4

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

The emissions from this unit (EP 14) vent through the Rolling Mill Building Roof Monitor.

Authority for Requirement: DNR PSD Permit 94-A-561-S4

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

See Facility Periodic Opacity Monitoring under Plant-Wide Conditions.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 19**

Associated Equipment

Associated Emission Unit ID Numbers: 19

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Emission Unit vented through this Emission Point: 19  
Emission Unit Description: Outside Alloy Storage Bins (fugitive)  
Raw Material/Fuel: Alloys  
Rated Capacity: 200 TPH

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 0% <sup>(1)</sup>  
Authority for Requirement: DNR PSD Permit 95-A-775  
567 IAC 23.3(2)"d"

<sup>(1)</sup> This opacity limit applies at the property line of the facility

Pollutant: Particulate Matter (PM)  
BACT Emission Limit(s): 0.192 lb/hr and 0.84 TPY  
Authority for Requirement: DNR PSD Permit 95-A-775

Pollutant: PM<sub>10</sub>  
BACT Emission Limit(s): 0.192 lb/hr and 0.84 TPY  
Authority for Requirement: DNR PSD Permit 95-A-775

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No   
For opacity at the property line

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*The data pertaining to the plan must be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with these sources of emissions.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 20**

Associated Equipment

Associated Emission Unit ID Numbers: 20

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Emission Unit vented through this Emission Point: 20  
Emission Unit Description: Alloy & Desulfurization System  
Raw Material/Fuel: Alloys  
Rated Capacity: 200 TPH

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 25**

### Associated Equipment

Associated Emission Unit ID Numbers: 25

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Emission Unit vented through this Emission Point: 25

Emission Unit Description: Reheat Furnace Emergency Pump

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 420 BHP

### **Applicable Requirements**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20 %

Authority for Requirement: DNR Construction Permit 01-A-1229  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 1.0 lb/hr and 0.075 TPY

Authority for Requirement: DNR Construction Permit 01-A-1229

Pollutant: PM<sub>10</sub>

Emission Limit(s): 1.0 lb/hr and 0.075 TPY

Authority for Requirement: DNR Construction Permit 01-A-1229

Pollutant: Sulfur Oxides (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 01-A-1229  
567 IAC 23.3(3)"b"

Pollutant: Nitrogen Dioxide (NO<sub>x</sub>)

Emission Limit(s): 3.0 lb/hr and 0.225 TPY

Authority for Requirement: DNR Construction Permit 01-A-1229

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1.0 lb/hr and 0.075 TPY

Authority for Requirement: DNR Construction Permit 01-A-1229

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 3.0 lb/hr and 0.225 TPY

Authority for Requirement: DNR Construction Permit 01-A-1229

## NESHAP:

The emergency engine, EP 25 is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) this compression ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

### Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

### Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

### Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

### Recordkeeping Requirements 40 CFR 63.6655

3. Keep records of the maintenance conducted on the stationary RICE.

4. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

3. An initial notification is not required per 40 CFR 63.6645(a)(5).
4. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ  
567 IAC 23.1(4)"cz"

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Hours of operation:

- A. This unit shall not operate more than a maximum of 150 hours per twelve (12) month period rolled monthly.
- B. The operation of this unit is limited to a short weekly test and emergency situations.

Process throughput:

- A. The fuel burned in this unit shall be diesel fuel with a maximum sulfur content of 0.5% by weight.

Reporting & Recordkeeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. A record of the time of each use of this unit shall be recorded. This record shall include the time of startup, the duration of operation, and the reason for operation.
- B. A fuel certification or analysis shall be kept for each fuel delivery that shows the sulfur content of the fuel.

Authority for Requirement: DNR Construction Permit 01-A-1229

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 20  
Stack Opening, (inches, dia.): 5  
Exhaust Flow Rate (scfm): 940  
Exhaust Temperature (°F): 937  
Discharge Style: Unobstructed Vertical or Horizontal  
Authority for Requirement: DNR PSD Permit 01-A-1129

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

- Agency Approved Operation & Maintenance Plan Required?**      Yes  No
- Facility Maintained Operation & Maintenance Plan Required?**      Yes  No
- Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 27**

Associated Equipment

Associated Emission Unit ID Numbers: 27

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Emission Unit vented through this Emission Point: 27  
Emission Unit Description: Torch Cutting Table (fugitive)  
Raw Material/Fuel: Natural Gas, Oxygen, and Ambient Air  
Rated Capacity: 75 CFH Natural Gas, 800 CFH Oxygen, and 400 CFH Ambient Air

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this unit exiting the shipping building through the roof vent shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 10% <sup>(1)</sup>  
Authority for Requirement: DNR Construction Permit 99-A-362-S2  
567 IAC 23.3(2)"d"

<sup>(1)</sup> This opacity limit applies to the shipping building roof vent from which the emissions from this unit exhaust.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- A. This unit shall only be supplied natural gas and oxygen to fuel the combustion at this unit.
- B. This unit is limited to the operation of two (2) burners at any one time.
- C. The natural gas usage for each burner shall not exceed 75 standard cubic feet per hour.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. At the end of each working day, record the number of hours the torch cutting table operated over the previous day.

- B. At the end of each working day, record the amount of natural gas consumed by the torch-cutting table over the previous day.
- C. Monthly, calculate the hourly average natural gas consumption rate for each day by dividing the amount of gas consumed on that day by the number of hours the emission unit operated on that day. The monthly calculations for a given month shall be performed no later than one week after the end of each month.
- D. If the owner/operator changes manufacturers or is informed by the manufacturer that the amount of oxygen used in the cutting process has changed, then the owner/operator must inform the department within ten (10) days of using the new equipment under the changed conditions.

Authority for Requirement: DNR PSD Permit 99-A-362-S2

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

The emissions from this unit vent through the Shipping Building Roof Vent.

Authority for Requirement: DNR PSD Permit 94-A-362-S2

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

See Facility Periodic Opacity Monitoring under Plant-Wide Conditions.

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 34 (Internally Vented)**

### Associated Equipment

Associated Emission Unit ID Numbers: 34

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Emission Unit vented through this Emission Point: 34

Emission Unit Description: Ink Stencil Machine

Raw Material/Fuel: Water Based Ink

Rated Capacity: N/A

### **Applicable Requirements**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

There are no emission limits at this time.

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- A. The ink usage shall be limited to 600 gallons per twelve-month rolling period.
- B. Total VOC content of the ink shall not exceed 0.56 lbs. per gallon.
- C. Total HAP content of the ink shall not exceed 0.56 lbs. per gallon.

Reporting & Recordkeeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The MSDS/SDS sheets for any ink used.
- B. Per twelve-month rolling total, record the quantity of ink used (in gallons).

Authority for Requirement: DNR Construction Permit 02-A-789

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 35**

### Associated Equipment

Associated Emission Unit ID Numbers: 35

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Emission Unit vented through this Emission Point: 35  
Emission Unit Description: Quality Control Hand Scarfing (fugitive)  
Raw Material/Fuel: Natural Gas  
Rated Capacity: 40 scf/hr

### **Applicable Requirements**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40 % <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 08-A-518-P  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.25 lb/hr

Authority for Requirement: Draft DNR Construction Permit 08-A-518-P

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

The following work practices are BACT:

- A. Hand scarfing is limited to a maximum of three (3) torches
- B. The torches shall only be supplied natural gas and oxygen to fuel combustion.
- C. The natural gas usage for each torch shall not exceed 40 standard cubic feet per hour.

Process throughput:

- A. A maximum of 525,600 tons of steel shall be hand scarfed per twelve month rolling period.

Reporting & Recordkeeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The owner or operator shall keep manufacturer's specifications demonstrating that the maximum capacity of each torch is equal to or less than 40 standard cubic feet per hour of natural gas.
- B. At the end of each working day, record the amount of steel (in tons) that was hand scarfed.
- C. Monthly, calculate the amount of steel that was hand scarfed that month and update the twelve month rolling total.

Authority for Requirement: DNR Construction Permit 08-A-518-P

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: 36A & 36B

### Associated Equipment

Associated Emission Unit ID Numbers: See Table: Vacuum Tank Degasser

Emissions Control Equipment Description: See Table: Vacuum Tank Degasser

Table: Vacuum Tank Degasser

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Control Equipment Number	Control Equipment Description	Raw Material/Fuel	Rated Capacity (tons/hr)
36A	36	Vacuum Tank Degasser	CS2	Fabric Filter	Molten Steel	200
			CS3	Condenser		
36B			CS1	Wire Feed Baghouse		

### Applicable Requirements

#### Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Table: Vacuum Tank Degasser-Emission Limits

Emission Point Number	Associated Emission Unit Number	Opacity Limit 567 IAC 23.3(2)"d"	PM Limit		PM <sub>10</sub> Limit lb/hr	Authority for Requirement (Construction Permit No.)
			lb/hr	gr./dscf 567 IAC 23.3(2)"a"		
36A	36	40% <sup>(1)</sup>	0.56	0.1	0.56	06-A-790
36B		40% <sup>(2)</sup>	0.18	0.1	0.18	06-A-791

<sup>(1)</sup> An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

**Emission Point Characteristics**

*These emission points shall conform to the conditions specified in Table: Vacuum Tank Degasser Stacks*

Table: Vacuum Tank Degasser Stacks			Stack Characteristics				
Emission Point Number	Emission Unit Number	Construction Permit #	Height (feet)	Diameter (inches)	Exhaust Flowrate	Exhaust Temp. (°F)	Discharge Style
36A	36	06-A-790	20	6	130 scfm	109	Vertical Unobstructed
36B		06-A-791	80	38	10,000 acfm	Variable 200 max.	Vertical Unobstructed

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*The data pertaining to the plan must be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with these sources of emissions.*

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: 37, 38 & 41

### Associated Equipment

Associated Emission Unit ID Numbers: See Table: VTD Steam Generators

Table: VTD Steam Generators

<b>Emission Point Number</b>	<b>Associated Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material/Fuel</b>	<b>Rated Capacity (MMBtu/hr)</b>
37	37	Vacuum Tank Degasser Steam Generator #1	Natural Gas	25.1
38	38	Vacuum Tank Degasser Steam Generator #2	Natural Gas	25.1
41	41	Vacuum Tank Degasser Steam Generator #3	Natural Gas	25.1

### **Applicable Requirements**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from each emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permits 06-A-792-S1 (EP 37),  
10-A-147 (EP 38) and 10-A-146 (EP41)  
567 IAC 23.3(2)"d"

<sup>(1)</sup> An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.19 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-792-S1 (EP 37),  
10-A-147 (EP 38) and 10-A-146 (EP41)

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permits 06-A-792-S1 (EP 37),  
10-A-147 (EP 38) and 10-A-146 (EP41)  
567 IAC 23.3(2)"b"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.19 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-792-S1 (EP 37),  
10-A-147 (EP 38) and 10-A-146 (EP41)

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permits 06-A-792-S1 (EP 37),  
10-A-147 (EP 38) and 10-A-146 (EP41)  
567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 0.88 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-792-S1 (EP 37),  
10-A-147 (EP 38) and 10-A-146 (EP41)

### **NSPS Applicability**

These units are subject to NSPS Subpart Dc – Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units and Subpart A – General Provisions.

Authority for Requirement: 40 CFR Part 60 Subpart Dc  
567 IAC 23.1(2)"III"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- A. A maximum of two (2) of the three (3) VTD steam generators, EU-37 (Permit No. 06-A-792-S1), EU-38 (Permit No. 10-A-147) or EU-41 (Permit No. 10-A-146) may operate at any one time.
- B. Natural Gas shall be the only fuel of use.

Reporting & Recordkeeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. Maintain a record showing the date and hours of operation for each steam generator (Emission Units 37, 38 and 41).
- B. Maintain a record of the type of fuel burned i.e. fuel bill, in each steam generator.

Authority for Requirement: DNR Construction Permits 06-A-792-S1 (EP 37),  
10-A-147 (EP 38) and 10-A-146 (EP41)

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 80

Stack Opening, (inches, dia.): 38

Exhaust Flow Rate (scfm): 6,800

Exhaust Temperature (°F): 375

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 06-A-792-S1 (EP 37),  
10-A-147 (EP 38) and 10-A-146 (EP41)

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 40**

Associated Equipment

Associated Emission Unit ID Number: 40

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Emission Unit vented through this Emission Point: 40  
Emission Unit Description: Cooling Tower  
Raw Material/Fuel: water  
Rated Capacity: 180,000 gal/hr

**Applicable Requirements**

**Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 40%  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)  
Emission Limit(s): 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- A. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 2,000 ppm for any single sampling event.

Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The performance testing on Total Dissolved Solids (TDS) shall be completed at a minimum of once per calendar month, for each month of operation. Testing done to determine TDS concentrations for all on-site cooling towers is acceptable to demonstrate compliance with permitted levels. In addition, indirect measurement methods may be used to determine TDS concentrations (i.e., conductivity).

Authority for Requirement: DNR Construction Permit 10-A-063

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 37.3  
Stack Opening, (inches, dia.): 11  
Exhaust Flow Rate (scfm): 265,200  
Exhaust Temperature (°F): 85  
Discharge Style: Vertical, Unobstructed  
Authority for Requirement: DNR Construction Permit 10-A-063

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 24**

### Associated Equipment

Associated Emission Unit ID Number: 24

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Emission Unit vented through this Emission Point: 24  
Emission Unit Description: Melt Shop Emergency Pump  
Raw Material/Fuel: Diesel Fuel  
Rated Capacity: 43 BHp/hr

### **Applicable Requirements**

#### **Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit: 40 %  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter  
Emission Limit: 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limit: 2.5 lb/MMBtu  
Authority for Requirement: 567 IAC 23.3(3)"b"

#### NESHAP:

The emergency engine, EP 24 is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) this compression ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

#### Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

#### Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.

3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

#### Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

#### Recordkeeping Requirements 40 CFR 63.6655

5. Keep records of the maintenance conducted on the stationary RICE.
6. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

#### Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

5. An initial notification is not required per 40 CFR 63.6645(a)(5).
6. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ  
567 IAC 23.1(4)"cz"

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the following operational limits and requirements.*

Process Throughput:

The sulfur content of any number one or number two diesel fuel combusted at this facility shall not exceed 0.5% by weight.

Authority for Requirement: 567 IAC 23.3(3)

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **IV. General Conditions**

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

### **G1. Duty to Comply**

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

### **G2. Permit Expiration**

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permits, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

### **G3. Certification Requirement for Title V Related Documents**

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

#### **G4. Annual Compliance Certification**

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

#### **G5. Semi-Annual Monitoring Report**

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

#### **G6. Annual Fee**

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

#### **G7. Inspection of Premises, Records, Equipment, Methods and Discharges**

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

#### **G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

#### **G9. General Maintenance and Repair Duties**

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

#### **G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
  - a. The date, place and time of sampling or measurements
  - b. The date the analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses; and
  - f. The operating conditions as existing at the time of sampling or measurement.
  - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

**G11. Evidence used in establishing that a violation has or is occurring.**

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
  - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
  - b. Compliance test methods specified in 567 Chapter 25; or
  - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a. Any monitoring or testing methods provided in these rules; or
  - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

**G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

**G13. Hazardous Release**

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

**G14. Excess Emissions and Excess Emissions Reporting Requirements**

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the

incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

## 2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

#### **G15. Permit Deviation Reporting Requirements**

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

#### **G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations**

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

#### **G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification**

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
  - e. The changes comply with all applicable requirements.
  - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

**G18. Duty to Modify a Title V Permit**

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that does any of the following:
  - i. Correct typographical errors
  - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - iii. Require more frequent monitoring or reporting by the permittee; or
  - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
  - i. Do not violate any applicable requirement;
  - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
  - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
  - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
  - v. Are not modifications under any provision of Title I of the Act; and
  - vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - ii. The permittee's suggested draft permit;
  - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

### 3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

#### **G19. Duty to Obtain Construction Permits**

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

#### **G20. Asbestos**

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

#### **G21. Open Burning**

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"j"; 567 IAC 23.2(3)"j" - *State Only*

#### **G22. Acid Rain (Title IV) Emissions Allowances**

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable

emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

### **G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements**

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives

Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

#### **G24. Permit Reopenings**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
  - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
  - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
  - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
  - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

#### **G25. Permit Shield**

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
  - a. Such applicable requirements are included and are specifically identified in the permit;  
or
  - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
  - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

#### **G26. Severability**

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

#### **G27. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

#### **G28. Transferability**

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of *567 IAC 22.111(1)*. *567 IAC 22.111 (1)"d"*

#### **G29. Disclaimer**

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

#### **G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification**

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance

evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
Wallace State Office Building  
502 E 9<sup>th</sup> St.  
Des Moines, IA 50319-0034  
(515) 725-9545

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

*567 IAC 25.1(7)"a", 567 IAC 25.1(9)*

### **G31. Prevention of Air Pollution Emergency Episodes**

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

*567 IAC 26.1(1)*

### **G32. Contacts List**

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits  
U.S. EPA Region 7  
Air Permits and Compliance Branch  
11201 Renner Blvd.  
Lenexa, KS 66219  
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
Wallace State Office Building  
502 E 9<sup>th</sup> St.  
Des Moines, IA 50319-0034  
(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

**Field Office 1**

909 West Main – Suite 4  
Manchester, IA 52057  
(563) 927-2640

**Field Office 2**

2300-15th St., SW  
Mason City, IA 50401  
(641) 424-4073

**Field Office 3**

1900 N. Grand Ave.  
Spencer, IA 51301  
(712) 262-4177

**Field Office 4**

1401 Sunnyside Lane  
Atlantic, IA 50022  
(712) 243-1934

**Field Office 5**

7900 Hickman Road, Suite #200  
Windsor Heights, IA 50324  
(515) 725-0268

**Field Office 6**

1023 West Madison Street  
Washington, IA 52353-1623  
(319) 653-2135

**Polk County Public Works Dept.**

Air Quality Division  
5885 NE 14th St.  
Des Moines, IA 50313  
(515) 286-3351

**Linn County Public Health**

Air Quality Branch  
501 13th St., NW  
Cedar Rapids, IA 52405  
(319) 892-6000

**Appendix A: Site Specific Monitoring Plan for a Broken Bag Detector System EAF/LMF Baghouse**



**SSAB IOWA INC.**  
STEEL PRODUCTS OPERATION  
ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) OPERATIONAL CONTROL  
PROCEDURE

<b>BROKEN BAG DETECTOR SITE SPECIFIC MONITORING PLAN</b>	PAGE 1 OF 29	07 ENVPR-03
PRODUCTION AREA: MELTSHP	WORKSTATION: ALL	

**SITE SPECIFIC MONITORING PLAN**  
For The  
**BROKEN BAG DETECTOR SYSTEM EAF/LMF BAGHOUSES**  
IOWA DEPARTMENT OF NATURAL RESOURCES AIR DIVISION

**Owner:**  
**SSAB IOWA INC.**  
**MONTPELIER WORKS**

Location:  
SSAB Iowa Inc.  
1770 Bill Sharp Boulevard  
Muscatine, Iowa 52761

PREPARED BY: C. Askins	APPROVED BY: 	DATE ISSUED: January 22, 2001
FORM NO.: 07-ENVPR-03	REVISION NO.: 5	DATE OF REVISION: July 18, 2013



**SSAB IOWA INC.**  
STEEL PRODUCTS OPERATION  
ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) OPERATIONAL CONTROL  
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STEEL PRODUCTS OPERATION  
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- 6 Appendix A BBD SYSTEM QA PLAN
- 7 Appendix B SAMPLE PREVENTATIVE MAINTENANCE RECORD
- 8 Appendix C BBD SYSTEM ALARM NOTIFICATION LEVEL "EAF Baghouse  
Documentation Form"
- 9 Appendix D SPARE PARTS LIST

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SECTION 1.0  
SITE SPECIFIC MONITORING PLAN  
INTRODUCTION

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**SSAB IOWA INC.**  
 STEEL PRODUCTS OPERATION  
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**1.0 Monitoring Plan Introduction**

This Site Specific Monitoring Plan (Monitoring Plan) is applicable to the operation of the triboelectric broken bag detection system installed on the Electric Arc Furnace/Ladle Metallurgy Furnace (EAF/LMF) Baghouses at the SSAB Iowa Inc. plant located in Montpelier, Iowa.

**1.1 Equipment Specification/Certification**

The broken bag detection system selected by SSAB Iowa Inc. (SSAB) for use on the EAF/LMF Emission Control Baghouses is manufactured by Auburn International, Inc. (Auburn), and uses the triboelectric principle of particle detection. The system specification is as follows:

	Baghouse 1 (CE-1A)	Baghouse 2 (CE-1B)
Manufacturer:	Auburn International, Inc.	Auburn International, Inc.
Model:	Tribolink™	Tribo.dsp U3400
Number of Probe Groups:	4	12
Detector Material of Construction:	316 Stainless Steel	316 Stainless Steel
Probe Temperature Range:	-40 °F to 1,100 °F	-40 °F to 1,000 °F
Input/Output Interface:	PC	PC
Operating System Platform:	MS Windows	MS Windows

**Manufacturer's Information:**

Address: Auburn Systems, LLC  
 8 Electronics Avenue  
 Danvers, MA 01923

Phone: (800) 255-5008  
 (978) 777-2460

Fax: (978) 777-8820

E- mail: [triboflow@auburnsys.com](mailto:triboflow@auburnsys.com)

Home Page: [www.auburnsys.com](http://www.auburnsys.com)

**Manufacturer's Certification of System Performance:**

The manufacturer's performance certification required by 40 CFR 60.273 (e)(1) is included as the next page of this section.

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## CERTIFICATE OF COMPLIANCE

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CUSTOMER: IPSCO Steel - IA  
SALES ORDER#: 20000297  
PURCHASE ORDER#: ISI-115683  
DATE OF SHIPMENT: JULY 25, 2000

---

This certifies that the above referenced Tribo.link system meets or exceeds the BLD System Certification 40 CFR 60.273, paragraph (e) which states: The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

Earl Parker

Auburn Systems  
Vice President



**SSAB IOWA INC.**  
STEEL PRODUCTS OPERATION  
ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) OPERATIONAL CONTROL  
PROCEDURE

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**1.2 Basis of Site Specific Monitoring Plan**

This Monitoring Plan and the appended Quality Assurance (QA) Plan are being applied to the broken bag detection system on the EAF/LMF Baghouses as provided for under 40 CFR 60, Subpart AAa, as amended by 70 PR 8530, 2/22/05, and the IDNR Permit condition number 16. This system is installed and will be used to insure compliance with the permit and the standard (40 CFR 60.273 (e)).

The Monitoring Plan is organized to respond to the specific requirements listed in 40 CFR 60 Subpart AAa, and incorporates the recommendations found in the USEPA guidance document "Fabric Filter Bag Leak Detection Guidance" published in September 1997 [EPA-45/R-98-015].

**End of Section 1.0**

PREPARED BY: C. Askins	APPROVED BY: 	DATE ISSUED: January 22, 2001
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**SSAB IOWA INC.**  
STEEL PRODUCTS OPERATION  
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**BROKEN BAG DETECTOR SITE SPECIFIC  
MONITORING PLAN**

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PRODUCTION AREA: MELTSHOP

WORKSTATION: ALL

**SECTION 2.0  
SYSTEM MONITORING PROGRAM**

<b>PREPARED BY:</b> C. Askins	<b>APPROVED BY:</b> 	<b>DATE ISSUED:</b> January 22, 2001
<b>FORM NO.:</b> 07-ENVPR-03	<b>REVISION NO.:</b> 5	<b>DATE OF REVISION:</b> July 18, 2013



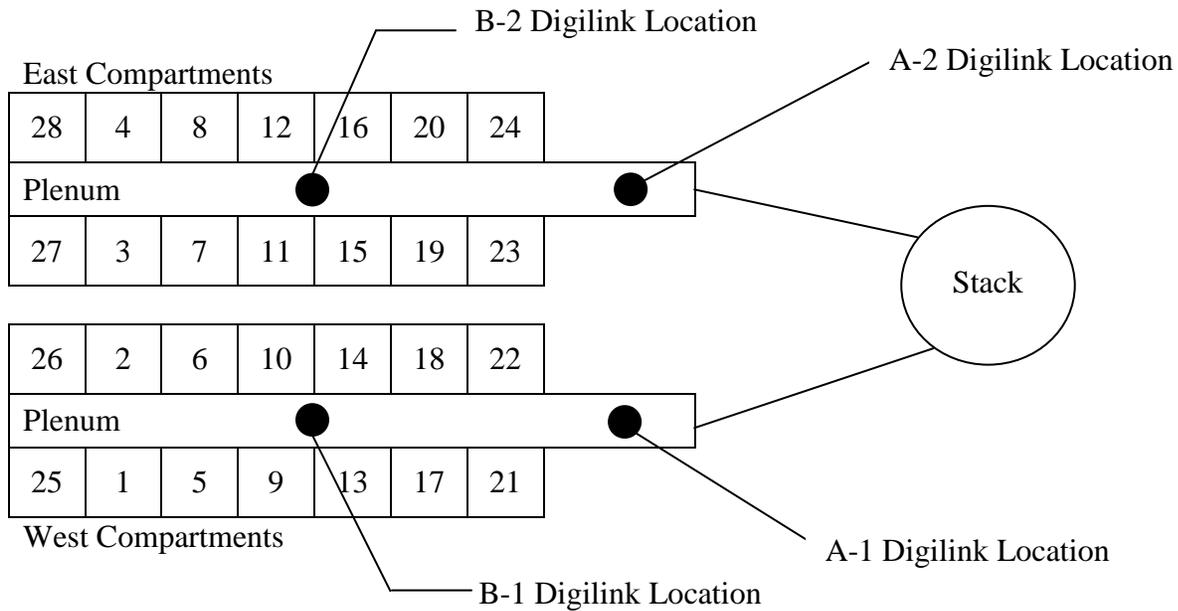
**SSAB IOWA INC.**  
 STEEL PRODUCTS OPERATION  
 ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) OPERATIONAL CONTROL  
 PROCEDURE

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**2.0 System Monitoring Program**

For Baghouse 1 (CE-1A), the BBD system is generally laid out as illustrated in Figure 2.1. There are 2 main exhaust plenums leading to the main I.D. fans and stack. The “B” probe groups are located upstream of the “A” probe groups in each exhaust plenum. This arrangement generally divides this baghouse into 4 zones for monitoring emissions from the respective compartments in each zone.

**Figure 2.1  
 BBD System Probe Location Diagram for Baghouse 1(CE-1A)**



The BBD system is equipped with communications that allows for the manufacturer to perform remote diagnostics on the system and initiate repair of the software from off-site.

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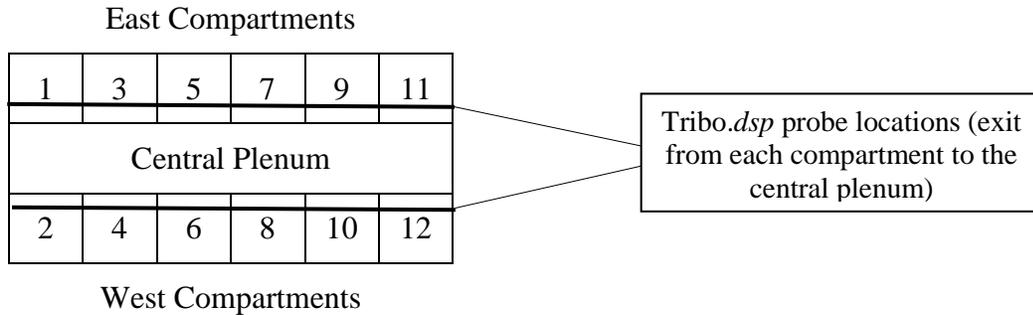


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For Baghouse 2 (CE-1B), the BBD system is generally laid out as illustrated in Figure 2.2. There is a single main exhaust plenum that exhausts all compartments. Each individual compartment has a probe installed in it to provide emissions monitoring for that compartment. This arrangement divides the baghouse into 12 zones for monitoring emissions from each compartment.

**Figure 2.2**  
**BBD System Probe Location Diagram for Baghouse 2 (CE-1B)**



**2.1 Alarm Condition Discussion**

The BBD system scale factor and alarm settings for each of the probe groups are listed in Tables 2.1 and 2.2. The “alarm” levels are set to be preventative and only the following alarm is subject to the regulation requirements of responding within one hour of the alarm and completing corrective action(s) within three hours.

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**Figure 2.1**  
 Summary of Probe Alarm Levels for Baghouse 1 (CE-1A)

Parameter/Alarm Level	Probe A-1	Probe A-2	Probe B-1	Probe B-2
Time Constant	1	1	1	1
Scale Range, pico-amps	0-6,000	0-6,000	0-6,000	0-6,000
<b>Cleaning Spike</b>				
Scale Level	80%	80%	80%	80%
Spike Duration	2 sec	2 sec	2 sec	2 sec
<b>Caution Level</b>				
Scale Level	50%	50%	50%	50%
Spike Duration	60 sec	60 sec	60 sec	60 sec
<b>Alarm Level</b>				
Scale Level	65%	65%	65%	65%
Spike Duration	60 sec	60 sec	60 sec	60 sec
<b>Alarm Notification Level</b>				
Scale Level	65%	65%	65%	65%
Spike Duration	360 sec	360 sec	360 sec	360 sec

**Figure 2.2**  
 Summary of Probe Alarm Levels for Baghouse 2 (CE-1B)

Parameter/Alarm Level	All Probes
Time Constant	1
Scale Range, pico-amps	0-10,000
<b>Cleaning Spike</b>	
Scale Level	80%
Spike Duration	15 sec
<b>Alarm Level</b>	
Scale Level	65%
Spike Duration	60 sec
<b>Alarm Notification Level and shutdown of compartment</b>	
Scale Level	80%
Spike Duration	120 sec

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Only the Alarm Notification Level is subject to reporting and recordkeeping under the standard. The other levels of the system are intended to be internal operator information alarms that allow the operators to be proactive to conditions that could lead to a visible emission exceedence if not corrected.

**2.2 BBD System QA Program**

The Quality Assurance (QA) program for this BBD system is included in Appendix A of this Monitoring Program.

**2.3 BBD System Maintenance Program**

The BBD System is part of the computerized plant Preventative Maintenance (PM) Program. An example of the PM actions and records is included in Appendix B.

**2.4 BBD System Spare Parts List**

The BBD System spare parts list is included in Appendix D of this document.

**2.5 System Output Storage**

The output of the BBD system is stored electronically on the BBD computer(s). This arrangement provides real time, continuous back-up of the data.

Data is stored as a trend curve in the Auburn software that tracks an average time interval of six (6) minutes. The data can also be downloaded into Excel spreadsheets.

Data is stored on the hard drives for a minimum of three (3) years.

**End of Section 2.0**

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**SECTION 3.0  
SYSTEM OPERATING PROGRAM**

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**3.0 System Operating Program**

SSAB has been operating the Auburn BBD system on the EAF/LMF Baghouse 1 (CE-1A) since 1999. The BBD system for Baghouse 2 (CE-1B) has been in operation since its installation in 2012. SSAB has done quite a bit of research on the relationship of triboelectric signals to relative opacity. The sensitivity (scale factor), alarm levels, averaging periods, and baseline output used for the system are based upon comparison studies. Correlation functions have been developed for the system based upon regression of data collected over many months and the correlation testing. The results of the studies have been presented in papers to the Association of Iron and Steel Engineers and have been published in AISE Steel Technology magazine<sup>1</sup> and AIST Iron & Steel Technology magazine<sup>2</sup>.

**3.1 System Output Discussion**

The present output specification of the BBD System is generally described in Tables 2.1 and 2.2.

The operator may not adjust the averaging period, alarm set points or alarm delay time without agency approval from the initial set-up as listed in Tables 2.1 and 2.2. Exceptions are:

- (1) Seasonal adjustments quarterly to the sensitivity, should these be detected. The monitoring plan would be amended to reflect any such impacts detected in the future.
- (2) If opacity is observed for more than 4 consecutive 15 second observations (Method 9) without an alarm (Alarm Notification Level or Cleaning Spike Level), then the respective alarm would be adjusted to correct for the failure.

**3.2 Seasonal Effect upon the System**

At the present time there does not appear to be a seasonal effect upon the BBD system operation. It is understood that moisture affects the probe signal, and start-up intervals following extended shut downs will often give false alarms until the moisture is removed by the increase of the off gas temperature above the dew point. The amount of moisture build-up is higher during the wetter seasons of the year, however the correction of this interference does not require any changes to the system configuration.

The fact that seasonal effects are not present at this time does not preclude discovery of such an effect at some later date. Should such factors be discovered at a later date, the plan will be modified accordingly, and the revised plan submitted to the Department.

1 Wesselman, J.C & Askins, C.W. ,AISE Steel Technology, ©April 2002

2 Wesselman, J.C & Askins, C.W. ,AIST Iron & Steel Technology, ©April 2005

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### **3.3 Response to Excess Opacity and No Alarm Condition**

Should there be an excess opacity incident (any 6-minute average opacity greater than 3% and no Alarm Notification Level signaled by the BBD system), the exceedence would be reported as required by the permit and included in the six month monitoring report to IDNR. An investigation will be initiated to determine why there was no BBD System alarm for the event.

The results of the investigation and the corrective actions taken would be included in the 6 month report to the IDNR. Changes to this Monitoring Plan associated with the corrective actions would be made, and an updated Monitoring Plan would be submitted to the IDNR.

### **3.4 Use of a Common Alarm**

The four (4) probe groups for the Baghouse 1(CE-1A) BBD System use a common alarm. The HMI in the Baghouse 1 (CE-1A) control room is equipped with an audible alarm that sounds during alarm conditions. An alarm screen on the HMI is also activated. These alarms remain in operation until acknowledged by the operator.

The probes for the Baghouse 2 (CE-1B) BBD System also use a common alarm. The HMI in the Baghouse 2 (CE-1B) control room is equipped with an audible alarm that sounds during alarm conditions. An alarm screen on the HMI is also activated. These alarms remain in operation until acknowledged by the operator.

The designated SSAB maintenance/operations personnel responsible for the baghouses will be notified as soon as possible of the alarm condition.

### **3.5 Method 9 VE Observation Program**

USEPA Method 9 Visible Emission (VE) observations will be done at least once daily. Currently certified VE observers will be used to perform these observations.

**End of Section 3.0**

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**SECTION 4.0  
CORRECTIVE ACTION PROGRAM**

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**4.0 Corrective Action Program**

**4.1 Response Interval and Actions**

The response manner and timing to the alarm conditions listed in Tables 2.1 and 2.2 are outlined in Table 4.1. The only alarm condition subject to the 1 hour response and 3 hour corrective action requirements of the standard is the Alarm Notification Level. All other alarms are associated with internal protective/predictive information to allow operators to become aware of potential problems that can be investigated and corrected during the next scheduled maintenance outage of the equipment.

**4.2 Corrective Action Hierarchy**

The response and corrective action hierarchy for the BBD System alarm conditions is listed in Table 4.1.

**Table 4.1  
Alarm Response Summary**

Alarm Level	Subject to the Standard	Response Time	Response Action	Corrective Action
Cleaning Spike Level	No	ASAP	Recorded in HMI Alarm File	1. Recognize 1st alarm - multiple alarms Isolate the compartment and inspect. 2. Repair/Replace defective bag(s).
Caution Level	No	ASAP	Recorded in HMI Alarm File	1. Clean Probes. 2. Schedule Compartment Inspection next outage.
Alarm Level	No	ASAP	Recorded in HMI Alarm File	1. Clean Probes. 2. Schedule Compartment Inspection next outage.
Alarm Level Notification	Yes	ASAP 1 hr Max	Confirm Corrective Action Initiated	1. Immediate Isolation of Compartment 2. Clean Alarming Probes 3. Repair/Replace defective bag(s).

Only the Alarm Notification Level is subject to the response and corrective action time intervals identified in the standard. This is a response (or responses) in 1 hour or less and initiation of corrective action(s) in 3 hours or less.

**End of Section 4.0**

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**SECTION 5.0  
RECORDKEEPING PROGRAM**

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## 5.0 Recordkeeping Program

The recordkeeping program for this facility meets or exceeds the requirements of the standard.

### 5.1 Type, Method and Location of Record

The output of the BBD System will be stored electronically on the BBD computer. Stored data will include the following information:

- The average trend curve for each probe group as an individual file
- The alarm record file.

The following records will be maintained in the maintenance database of the plant.

- Monthly, Annual and other PM inspections or work on the BBD System.
- "EAF Baghouse Documentation Form" reports recording Alarm Notification Level incidents and any periods where opacity was observed for more than 4 consecutive 15 second observations (Method 9) and the Alarm Notification Level Alarm failed to activate.

Records are maintained for a minimum of 5 years.

### 5.2 Record of System Adjustments

Any adjustments made to the system will be recorded on the System Adjustment Form. A copy of the form will be maintained on file by the Environmental Manager.

### 5.3 Alarm Records and Actions

Responses to the Alarm Notification Level will be recorded on the Alarm response form. The completed forms will be maintained on file by the Environmental Manager or their designate. An example of the format is included in Appendix C of this document.

### 5.4 Monthly Inspection Records

The Monthly inspections required by this Monitoring Plan are part of the QA Plan. When these inspections are completed, they are logged into the PM record of the maintenance data base system.

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The Monthly inspection format and inspection records are described in the QA Plan included in Appendix A. The PM record example is also included in Appendix B of this document.

Monthly inspections will be conducted and recorded by the Maintenance Department.

### **5.5 Record of QA Inspections and Actions**

Other QA inspections and calibrations required by the QA Plan will be conducted as described in that Plan. All corrective actions and form records will be posted to the PM record in the maintenance database. Copies of the Baghouse Documentation Form recording instances of excessive opacity or Alarm Notification Levels will be forwarded to the Environmental Manager or their designate for recording and filing.

QA inspections and calibrations will be conducted by the Maintenance Department. Where assistance from the manufacturer is needed to correct problems, this will be done in a timely fashion.

**End of Section 5.0**

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## APPENDICES

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**APPENDIX A  
BBD SYSTEM QA PROGRAM**

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The BBD system quality assurance plan is a separate document. See 07-ENVPR-04 for the BBD system quality assurance plan.

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**APPENDIX B**  
**SAMPLE PREVENTATIVE MAINTENANCE (PM) RECORDS**

The preventative maintenance records are contained in the maintenance PM system that is accessed through any company computer.

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APPENDIX C  
BBD SYSTEM ALARM NOTIFICATION LEVEL  
"EAF Baghouse Documentation Form"

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The BBD SYSTEM ALARM NOTIFICATION LEVEL "EAF Baghouse Documentation Form" is identified as Form 05-ENVFRM-01 in the EMS.

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**APPENDIX D  
SPARE PARTS LIST**

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Broken Bag Detector Spare Parts List		
Order Number	Part Description	Additional Part Description
MS164-0024	FERRULE:BROKEN BAG DETECTOR,WELDABLE #275-00-100	FERRULE, WELDABLE, DUCT MOUNTED FOR PROBE, BROKEN BAG DETECTOR, DRAWING #275-00-100
MS164-0025	GASKET:BROKEN BAG DETECTOR #275-00-100	GASKET, OR, AIR TIGHT BETWEEN FERRULE & PROBE, BROKEN BAG DETECTOR, DRAWING #275-00-100
MS164-0026	FUSE:INTERFACE DATALINK BOARD,4A,125V #275-00-100	FUSE,4 AMP, 125 V, FOR INTERFACE DATALINK BOARD, BROKEN BAGHOUSE DETECTOR, DRAWING #275-00-100
MS164-0027	FUSE:MAIN BOARD,112A,125V #275-00-100	FUSE 1/2 AMP, 125V, FOR EIGHT CHANNEL I/O MAIN BOARD, BROKEN BAGHOUSE DETECTOR, DRAWING #275-00-100
MS164-0028	FUSE:INTERFACE BOARD,3/8A,125V #275-00-100	FUSE 3/8 AMP,125V, FOR DIGILINK, TRIBOTRAC & MAIN INTERFACE BOARD, BROKEN BAGHOUSE DETECTOR, DRAWING #275-00-100
MS164-0029	KIT:DIGILINK FIELD #275-00-100	DIGILINK FIELD KIT, END CONNECTORS FOR COAXIAL CABLE, BROKEN BAG DETECTOR, DRAWING #275-00-L00
MS164-0030	PROBE:5FT LG,1FT EXTENSION, 2000-199Q, 5'	PROBE, 2000-199Q, 5' LENGTH, 1' EXTENSION, DAISY CHAIN POSITION 'B', BROKEN BAG DETECTOR
MS164-0031	PROBE:6FT LG, 2000-159Q, 6	PROBE, 2000-159Q, 6' LENGTH, 1.5" PFA, DAISY CHAIN, POSITION 'A', BROKEN BAG DETECTOR
MS164-0032	BOARD, PRINTED CIRCUIT: BROKEN BAG DETECTOR LEVEL, ALARM RELAY OUTPUT CARD	OUTPUT CARD, RELAY, LOW LEVEL/HIGH LEVEL ALARM, BROKEN BAG DETECTOR
MS164-0033	BOARD, PRINTED CIRCUIT:BROKEN BAG DETECTOR, INPUT, 4-20MA, CARD	INPUT CARD TO COMS, 4-20MA, BROKEN BAG DETECTOR
MS164-0034	BOARD, PRINTED CIRCUIT:BROKEN BAG DETECTOR, OUTPUT,4-20MA, CARD	OUTPUT CARD TO PLC, 4-20MA, BROKEN BAG DETECTOR
MS164-0035	SET:CIRCUIT BOARD DIGILLNK, BROKEN BAG DETECTOR	CIRCUIT BOARD SET, DIGILLNK, BROKEN BAG DETECTOR
MS164-0065	CABLE,COAXIAL:1/8 IN DIA, BLUE	CABLE, COAXIAL, AUBURN INTL.; 1/8 DIA. BLUE, FOR BROKEN BAG DETECTOR PROBE, DRAWING # 275-00-100
MS164-0066	BOARD, PRINTED CIRCUIT:BROKEN BAG DETECTOR, INPUT/OUTPUT, 8 CHANNEL	MOTHER BOARD, 8 CHANNEL I/O MAIN PCB, TRIBOLINK MODEL 6300, BROKEN BAG DETECTOR
MS164-0067	BOARD, PRINTED CIRCUIT:BROKEN BAG DETECTOR	CIRCUIT BOARD, TRIBOTRAC, BROKEN BAG DETECTOR, AUBURN INTL
MS164-0107	BOARD CIRCUIT, BROKEN BAG MOTHER BOARD WITH POWER SUPPLY; TRIBOUNK INTERFACE TO PC BOARD	



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BOARD, BROKEN BAG SYSTEM, TRIBOLINK DATA CARD

## **VI. Appendix B – NSPS and NESHAP Requirements Web Links**

**40 CFR 60 Subpart AAa. Web Link to Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983:** <https://www.epa.gov/stationary-sources-air-pollution/electric-arc-furnaces-eafs-and-argon-oxygen-decarburization-vessels>

**40 CFR Part 60, Subpart Dc:** Web Link to Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units: [https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.d\\_0c](https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.d_0c)

**40 CFR 63 Subpart YYYYY:** Web Link to National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities: <https://www.epa.gov/stationary-sources-air-pollution/electric-arc-furnace-steelmaking-facilities-national-emission>

**40 CFR Part 63, Subpart ZZZZ:** Web Link to National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines: <https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;rgn=div6;view=text;node=40%3A14.0.1.1.1.1;idno=40;sid=e94dcfde4a04b27290c445a56e635e58;cc=ecfr>