# Iowa Department of Natural Resources Draft 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-004R3 Expiration Date: 10/15/2028 Permit Renewal Application Deadline: 04/15/2028

EIQ Number:92-6869Facility File Number:70-08-002

<u>Responsible Official</u> Name: Mr. Tom Cox Title: General Manager Mailing Address: 1770 Bill Sharp Blvd. Muscatine, IA 52761 Phone #: (563) 381-5606

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

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.

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For the Director of the Department of Natural Resources

Mainie Stein

Marnie Stein, Supervisor of Air Operating Permits Section

10/26/2023

Date

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## VI. Appendix B: NSPS and NESHAP Requirements Web Links......114 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        |
| RNG      | .Renewal Natural Gas                           |
| 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 |

## <u>Pollutants</u>

| Be               | beryllium   |
|------------------|---|
| СО               | carbon monoxide                                     |
| F                | fluoride  |
| НАР              | 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.-MuscatinePermit Number:07-TV-004R3

Facility Description: Steel Mill (SIC 3312)

## **Equipment List**

A. EAF/LMF Meltshop Stacks

| Emission<br>Point Number | Emission Unit<br>Number | Emission Unit Description          | IDNR<br>Construction<br>Permit<br>Number |
|--------------------------|-------------------------|------------------------------------|--|
|                          | 1.1                     | Scrap Preheat Shell                |  |
| 1 A                      | 1.2                     | Electric Arc Furnace Melting Shell | 94-A-548-P12                             |
| IA                       | 1.3                     | Ladle Metallurgy Furnace (LMF)     |  |
|                          | 11                      | Alloy Bins Transfer                |  |
| 1D                       | 1.1                     | Scrap Preheat Shell                | 00 A 726 D6                              |
| ID                       | 1.2                     | Electric Arc Furnace Melting Shell | 09-A-/30-P0                              |

#### B. LMF Meltshop Roof Monitor

| Emission<br>Point Number | Emission Unit<br>Number | Emission Unit Description | IDNR<br>Construction<br>Permit<br>Number |
|--------------------------|-------------------------|---------------------------|--|
|                          | 2                       | Caster Mold               | 94-A-549-S1                              |
|                          | 7                       | Tundish Dump              | 94-A-554-S1                              |
|                          | 15                      | Ladle Dryer               | 94-A-562-P6                              |
|                          | 16.1                    | Ladle Preheater           |  |
|                          | 16.2                    | Ladle Preheater           | 94-A-563-P6                              |
| 2                        | 16.3                    | Ladle Preheater           |  |
| 2                        | 16.4                    | Ladle Preheater           |  |
|                          | 17.1                    | Tundish Dryer             |  |
|                          | 17.2                    | Tundish Dryer             | 94-A-564-P5                              |
|                          | 17.3                    | Tundish Dryer             |  |
|                          | 18.1                    | Tundish Preheater         | 04 A 565 D4                              |
|                          | 18.2                    | Tundish Preheater         | 94-A-303-P4                              |

#### C. Carbon Storage Silo

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

#### D. Storage Silos

| Emission<br>Point Number | Emission Unit<br>Number | Emission Unit Description | IDNR<br>Construction<br>Permit<br>Number |
|--------------------------|-------------------------|---------------------------|--|
| 12A                      | 12A                     | Lime Storage Silo         | 15-A-559-S1                              |
| 12B                      | 12B                     | Lime Storage Silo         | 15-A-560-S1                              |
| 12C                      | 12C                     | Dolomite Storage Silo     | 15-A-561-S1                              |
| 12D                      | 12D                     | Dolomite Storage Silo     | 15-A-562-S1                              |
| 39A                      | 39A                     | Carbon Storage Silo       | 15-A-575                                 |
| 39B                      | 39B                     | Carbon Storage Silo       | 15-A-576                                 |

### E. Roadways

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

#### F. Generators

| Emission<br>Point Number | Emission Unit<br>Number | Emission Unit Description                  | IDNR<br>Construction<br>Permit Number |
|--------------------------|-------------------------|--|---------------------------------------|
| 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                             |
| 42                       | 42                      | WAC Emergency Generator                    | 19-A-069-S1                           |
| 44                       | 44                      | R&D Emergency Generator                    | N/A                                   |
| 45                       | 45                      | River Treatment Plant Emergency Generator  | N/A                                   |
| 46                       | 46                      | Sewage Lifting Station Emergency Generator | N/A                                   |

# G. Miscellaneous Equipment

| Emission     | Emission Unit | Emission Unit Description                           | IDNR<br>Construction |
|--------------|---------------|---|----------------------|
| Point Number | Number        |   | Permit Number        |
| 6            | 6             | Oxy-fuel Caster Torch                               | 94-A-553-P4          |
| 10           | 10            | Steel Scrap Cutting Operations-4 Torches            | 94-A-557-P2          |
| 13           | 13            | Slab Reheating Furnace                              | 94-A-560-P6          |
| 14           | 14.1          | Temperature Retention Unit                          | 04 A 561 D5          |
| 14           | 14.2          | Temperature Retention Unit                          | 94-A-301-P3          |
| 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-P3          |
| 34           | 34            | Ink Stencil Machine                                 | 02-A-789             |
| 35           | 35            | Quality Control Hand Scarfing                       | 08-A-518-P1          |
| 36A          | 36A           | Versure Teals Desseer (VTD)                         | 06-A-790             |
| 36B          | 26            | vacuum rank Degasser (v ID)                         | 06-A-791             |
| 43           | - 36          | Vacuum Tank Degasser Mechanical Vacuum<br>Induction | 19-A-247             |
| 37           | 37            | VTD Steam Generator #1                              | 06-A-792-S2          |
| 38           | 38            | VTD Steam Generator #2                              | 10-A-147-S1          |
| 41           | 41            | VTD Steam Generator #3                              | 10-A-146-S1          |
| 40           | 40            | Cooling Tower                                       | 10-A-063             |
| 47           | 47            | Bay 3 Burn Bed                                      | 23-A-124             |
| 24           | 24            | Melt Shop Emergency Pump (< 400 BHp)                | N/A                  |

# Insignificant Activities Equipment List

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

# **II. Plant-Wide Conditions**

Facility Name:SSAB Iowa, Inc.Permit Number:07-TV-004R3

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

#### **Permit Duration**

The term of this permit is: Five (5) years Commencing on: 10/16/2023 Ending on: 10/15/2028

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.

#### **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-P2 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.

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

| <u>Opacity (visible emissions):</u>                              | 40% opacity  |
|--|--|
| Authority for Requirement:                                       | 567 IAC 23.3(2)"d"                                 |
| Sulfur Dioxide (SO <sub>2</sub> ):<br>Authority for Requirement: | 500 parts per million by volume 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"

<u>Fugitive Dust:</u> 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.

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

#### **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 YYYY-National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities.

| Authority for Requirement: | 40 CFR Part 63 Subpart YYYYY |
|----------------------------|------------------------------|
|                            | 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)"Ill"

The WAC Emergency Generator is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ] as it is an existing emergency RICE located at an area source of HAP emissions.

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

#### 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-004R3

## **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

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

Table: EAF/LMF Melt Shop (cont.)

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Emission<br>Unit<br>Description          | Emissions<br>Control<br>Equipment<br>ID No. | Emissions<br>Control<br>Equipment<br>Description | Raw<br>Material   | Rated Capacity  |
|-----------------------------|--|--|---|--|---|---|
| 10                          | 1.1                                      | Scrap Preheat<br>Shell                   | CE 1D                                       | Reverse Air                                      | Scrap Steel<br>and Alloys,<br>Natural Gas<br>or RNG and<br>Oxygen | 200 TPH Steel<br>and Alloys,<br>154,000 scfh<br>Oxygen and<br>154,000 scfh<br>Natural Gas |
| ТВ                          | 1.2                                      | Electric Arc<br>Furnace<br>Melting Shell | CE 1B                                       | Baghouse   | Scrap Steel<br>and Alloys,<br>Natural Gas<br>or RNG and<br>Oxygen | 200 TPH Steel<br>and Alloys,<br>154,000 scfh<br>Oxygen and<br>154,000 scfh<br>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"

<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.** 

Pollutant: Opacity Emission Limit(s): 3% Authority for Requirement: DNR PSD Construction Permit 94-A-548-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B) 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B)

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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B) Pollutant: Lead (Pb)<sup>(2)</sup> Emission Limit(s): 0.00055 lb/ton (3) and 0.49 TPY (4) Authority for Requirement: DNR PSD Construction Permit 94-A-548-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B) <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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B)

DNR PSD Construction Permit 09-A-736-P6 (1 40 CFR 60.272a(2) 567 IAC 23.1(2)"ww" 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>10</sub>) Emission Limit(s): 67.0 lb/hr <sup>(4)</sup> Authority for Requirement: DNR PSD Construction Permit 94-A-548-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B)

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.0052 gr/dscf Authority for Requirement: DNR PSD Construction Permit 94-A-548-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B) Pollutant: Carbon Monoxide (CO) Emission Limit(s): 386 lb/hr<sup>(4)</sup> Authority for Requirement: DNR PSD Construction Permit 94-A-548-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B) Pollutant: Lead (Pb) Emission Limit(s): 0.086 lb/hr<sup>(4)</sup> Authority for Requirement: DNR PSD Construction Permit 94-A-548-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (1B) Pollutant: Beryllium (Be) Emission Limit(s): 0.0004 TPY (1) and 9.1x10<sup>-5</sup> lb/hr (4) Authority for Requirement: DNR PSD Construction Permit 94-A-548-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (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 §60.19; *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 YYYYY (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 YYYYY 567 IAC 23.1(4)"dy"

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

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. The operating requirements and associated recordkeeping for this permit shall be:

- A. This unit shall only combust natural gas or renewable natural gas.
  - (1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.
- B. Per 40 CFR §60.274a(b), the owner or operator shall monitor the furnace static pressure once per shift.
- C. 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.

- D. 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.
- E. 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 H2O) gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.
- F. 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.
- G. Per 40 CFR §63.7700, the owner or operator shall maintain a scrap management plan at the plant.
- H. The owner or operator shall maintain records of scrap materials processed, by specification designation and quantity, at the plant.
- I. The owner or operator shall maintain a baghouse operation and maintenance plan at the facility.
- J. 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.
- K. 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.
- L. All other applicable work practice, operation, and maintenance requirements set forth in NESHAP Subparts A (40 CFR §63.1 40 CFR §63.15) and YYYYY (40 CFR §63.10680 40 CFR §63.10692) not specifically listed in this permit.
- M. Per 40 CFR §60.274a(a), the owner or operator shall maintain a log of the furnace static pressure.
- N. Per 40 CFR §60.274a(a), the owner or operator shall maintain 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).
- O. 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.
- P. Per 40 CFR §60.274a(a), a log of the results of from the EAF monitoring device required in Construction Permit Condition 5.D.
- Q. A log of the hours of operation for each baghouse scenario listed in Note 5 of Construction Permit Condition 3. 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, PM10 and PM2.5 emissions of these units for each calendar year.
- R. 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.
- S. All other applicable monitoring and recordkeeping requirements set forth in NESHAP Subparts A (40 CFR §63.1 – 40 CFR §63.15) and YYYYY (40 CFR §63.10680 – 40 CFR §63.10692) not specifically listed in this permit.
- T. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in Condition 5.L. of the Construction Permit.

| Authority for Requirement: | DNR PSD Construction Permit 94-A-548-P12 (1A) |
|----------------------------|---|
|                            | DNR PSD Construction Permit 09-A-736-P6 (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: H<br>Stacks          | Table: EAF/LMF Meltshop<br>Stacks |                          |                                    | 1                    | Stack Charact                  | eristics              |                           |
|-----------------------------|-----------------------------------|--------------------------|------------------------------------|----------------------|--------------------------------|-----------------------|---------------------------|
| Emission<br>Point<br>Number | Emission<br>Unit<br>Number        | Construction<br>Permit # | Height<br>(feet<br>from<br>ground) | Diameter<br>(inches) | Exhaust<br>Flowrate<br>(acfm)  | Exhaust<br>Temp. (°F) | Stack<br>Characteristics  |
| 1.A                         | 1.1<br>1.2<br>1.3<br>11           | 94-A-548-P12             | 152                                | 228                  | 296,000 to<br>1,100,000        | 150                   | Vertical,<br>Unobstructed |
| 1.B                         | 1.1<br>1.2                        | 09-A-736-P6              | 101.33                             | 180 x 1308           | 0 to<br>800,000 <sup>(1)</sup> | 180                   | Vertical,<br>Unobstructed |

<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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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-P12 (1A)DNR PSD Construction Permit 09-A-736-P6 (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) (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 <u>In</u> the Matter Of IPSCO Steel, Inc.

Pollutant – Nitrogen Oxides Stack Test to be Completed: Quarterly <sup>(1) (2)</sup> Test Method – 40 CFR 60, Appendix A, Method 7E Authority for Requirement - Administrative Consent Order Issued by EPA 3/3/2005 in <u>In</u> 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:
  - 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:
  - 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
    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-P12 (1A) DNR PSD Construction Permit 09-A-736-P6 (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 🖂 |

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)

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 (PM10)BACT Emission Limit(s):0.40 lb/hr and 1.76 TPYAuthority for Requirement:DNR PSD Permit 94-A-549-S1

Pollutant: Particulate Matter (PM)BACT Emission Limit(s):0.40 lb/hr and 1.76 TPYAuthority for Requirement:DNR PSD Permit 94-A-549-S1

Emission Unit vented through this Emission Point: 7Emission Unit Description:Tundish DumpRaw Material/Fuel:RefractoryRated 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 TPYAuthority for Requirement:DNR PSD Permit 94-A-554-S1

Pollutant: Particulate Matter (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.

| Emission Unit vented through this Emission Point: |               |  |
|---|---------------|--|
| 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-P6 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.

Pollutant: Particulate Matter (PM)Emission Limit(s):0.1 gr/dscfAuthority for Requirement:DNR PSD Permit 94-A-562-P6567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppm<sub>v</sub> Authority for Requirement: DNR PSD Permit 94-A-562-P6 567 IAC 23.3(3)"e"

#### **Operational Requirements with Associated Monitoring and 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 Department. Records shall be legible and maintained in an orderly manner.

- A. This unit shall only combust natural gas or renewable natural gas.
  - (1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.
- B. The maximum natural gas usage for the burner(s) in the dryer shall not exceed 4,550 standard cubic feet per hour, averaged over a working calendar day.
  - (1) For each working calendar day, the owner or operator shall record the amount, in standard cubic feet, of natural gas consumed by the ladle dryer. This determination shall be completed by the end of the next working calendar week.
  - (2) For each working calendar day, the owner or operator shall record the number of hours this equipment operated. This determination shall be completed by the end of the next working calendar week.
  - (3) For each working calendar day, the owner or operator shall calculate the daily average cubic feet of gas used by dividing the amount of natural gas fired on that working calendar day by the number of hours the ladle dryer operated on that working calendar day. This calculation shall be performed no later than 14 days after the end of the month.
- 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, averaged over a working calendar day.
  - For each calendar working day, the owner or operator shall record the amount, in standard cubic feet, of natural gas consumed by the Thermal Destruction System (TDS). This determination shall be completed by the end of the next working calendar week.
  - (2) For each working calendar day, the owner or operator shall record the number of hours this equipment operated. This determination shall be completed by the end of the next working calendar week.
  - (3) For each working calendar day, the owner or operator shall calculate the daily average cubic feet of gas used by dividing the amount of natural gas fired on that working calendar day by the number of hours the TDS operated on that working calendar day. This calculation shall be performed no later than 14 days after the end of the month.
- D. The temperature in the Thermal Destruction System (TDS) must be maintained above a minimum of 1,500 °F during the operation of the ladle dryer. (1) The owner or operator shall install, maintain and continuously operate a strip chart recorder or other continuous recording device to monitor the temperature in the TDS.
- E. The maximum amount of refractory material used shall not exceed 13,000 tons in any twelve (12) month rolling period.
  - (1) The owner or operator shall record the amount of refractory material used each month, in tons.
  - (2) The owner or operator shall calculate and record the twelve-month rolling total amount of refractory material used, on a monthly basis, in tons.

(3) The calculations shall be performed no later than 14 days after the end of the month.

- F. The owner or operator shall not reline ladles more than 307 times in any twelve (12) month rolling period.
  - (1) The owner or operator shall record the number of ladles that were relined each calendar month.
  - (2) The owner or operator shall calculate and record the twelve-month rolling total number of ladles that were relined, on a monthly basis.
  - (3) The calculations shall be performed no later than 14 days after the end of the month.
- G. The VOC content of the resin in the refractory brick shall not exceed a maximum of 5% by weight.
  - (1) SDS or other documentation from the refractory manufacturer showing the VOC content of the resin of the refractory brick shall be maintained according to the requirements of 29 CFR 1910.1200 or other schedule approved by OSHA.
- H. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:
  - (1) The date and time any inspection and/or maintenance was performed on the equipment;
  - (2) Any issues identified during the inspection and the date each issue was resolved;
  - (3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR PSD Permit 94-A-562-P6

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

| Emission Unit<br>Number | Emission Unit<br>Description | Raw Material          | Rated Capacity |
|-------------------------|------------------------------|-----------------------|----------------|
| 16.1                    | Ladle Preheater              | Natural Gas or<br>RNG | 12 MMBtu/hr    |
| 16.2                    | Ladle Preheater              | Natural Gas or<br>RNG | 12 MMBtu/hr    |
| 16.3                    | Ladle Preheater              | Natural Gas or<br>RNG | 12 MMBtu/hr    |
| 16.4                    | Ladle Preheater              | Natural Gas or<br>RNG | 12 MMBtu/hr    |

Table: Ladle Preheaters

#### **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% (1)  |
| Authority for Requirement: | DNR PSD Permit 94-A-563-P6                       |
|                            | 567 IAC 23.3(2)"d"                               |
| Authority for Requirement: | DNR PSD Permit 94-A-563-P6<br>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.

#### **Operating Requirements with Associated Monitoring and 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 Department. Records shall be legible and maintained in an orderly manner.

A. This unit shall only combust natural gas or renewable natural gas.

(1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.

B. The maximum natural gas usage for each burner shall not exceed 11,730 standard cubic feet per hour.

(2) At the end of each working day, record the number of hours the temperature retention units operated over the previous day.

(3) At the end of each working day, record the amount of natural gas consumed by the temperature retention units over the previous day.

(4) 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.

C. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:

(1) The date and time any inspection and/or maintenance was performed on the equipment;

(2) Any issues identified during the inspection and the date each issue was resolved;

(3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR PSD Permit 94-A-563-P6

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<br>Number | Emission Unit<br>Description | Raw Material          | Rated Capacity |
|-------------------------|------------------------------|-----------------------|----------------|
| 17.1                    | Tundish Dryer                | Natural Gas or<br>RNG | 6 MMBtu/hr     |
| 17.2                    | Tundish Dryer                | Natural Gas or<br>RNG | 6 MMBtu/hr     |
| 17.3                    | Tundish Dryer                | Natural Gas or<br>RNG | 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-P5 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.

#### **Operating Requirements with Associated Monitoring and 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 Department. Records shall be legible and maintained in an orderly manner.

A. The tundish dryers shall only combust natural gas or renewable natural gas.

(1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.

B. The maximum natural gas usage for each burner shall not exceed 3,000 standard cubic feet per hour.

(2) At the end of each working day, record the number of hours the tundish dryers operated over the previous day.

(3) At the end of each working day, record the amount of natural gas and renewable natural gas consumed by the tundish dryers over the previous day.

(4) Monthly, calculate the hourly average and natural gas and renewable 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.

C. The tundish dryers shall be used in the caster maintenance bay and the LMF meltshop. (1) Within 10 days of operating a tundish dryer in a location not identified in

Construction Permit condition 5.C, the owner/operator must submit written notification to the Department per the requirements of condition 12.D of the Construction Permit. 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.

D. The materials used in the lining process for the tundish shall contain no VOC's.

(1) SDS/MSDS for all materials used in the lining process for the tundish shall be maintained on site for review.

E. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:

(1) The date and time any inspection and/or maintenance was performed on the equipment;

(2) Any issues identified during the inspection and the date each issue was resolved;(3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR PSD Permit 94-A-564-P5

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

**Table: Tundish Preheaters** 

| Emission Unit<br>Number | Emission Unit<br>Description | Raw Material          | Rated Capacity             |
|-------------------------|------------------------------|-----------------------|----------------------------|
| 18.1                    | Tundish Preheater            | Natural Gas or<br>RNG | 12,366 ft <sup>3</sup> /hr |
| 18.2                    | Tundish Preheater            | Natural Gas or<br>RNG | 12,366 ft <sup>3</sup> /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% (1)                    |
| Authority for Requirement: | DNR PSD Permit 94-A-565-P4 |
|                            | 567 IAC 23.3(2)"d"         |

(1) 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.

| Pollutant: Particulate Matter | (PM)                       |
|-------------------------------|----------------------------|
| Emission Limit(s):            | 0.1 gr/dscf                |
| Authority for Requirement:    | DNR PSD Permit 94-A-565-P4 |
|                               | 567 IAC 23.3(2)"a"         |

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppm<sub>v</sub> Authority for Requirement: DNR PSD Permit 94-A-565-P4 567 IAC 23.3(3)"e"

#### **Operating Requirements with Associated Monitoring and 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 Department. Records shall be legible and maintained in an orderly manner.

A. The tundish preheaters shall only combust natural gas or renewable natural gas.

(1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.

B. The maximum natural gas and renewable natural gas usage for each burner shall not exceed 12,366 standard cubic feet per hour.

(1) At the end of each working day, record the number of hours the tundish preheaters operated over the previous day.

(2) At the end of each working day, record the amount of natural gas and renewable natural gas consumed by the tundish preheaters over the previous day.

(3) 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.

C. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:

(1) The date and time any inspection and/or maintenance was performed on the equipment;

(2) Any issues identified during the inspection and the date each issue was resolved;

(3) Any issues addressed during the maintenance activities and the date each issue was resolved.

## **Emission Point ID Number: 4**

#### Associated Equipment

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

| Та | able: Carbo                 | n Storage Silo                           |   |                     |                                 |                 |   |
|----|-----------------------------|--|---|---------------------|---------------------------------|-----------------|---|
|    | Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | ControlControlEquipmentEquipmentNumberDescription |                     | Emission<br>Unit<br>Description | Raw<br>Material | Rated<br>Capacity<br>(ft <sup>3</sup> ) |
|    | 4                           | 4  | CE-4  | Bin Vent<br>Filters | Carbon<br>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<br>Number | Emission Point<br>Number<br>Number<br>Associated<br>Emission Unit<br>Number |                    | PM Limit (each emission point)              | Authority for Requirement<br>(Construction Permit No.) |  |
|--------------------------|---|--------------------|---|--|--|
| 4                        | 4   | 40% <sup>(1)</sup> | 0.05 tons/yr.<br>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**

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.

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

Table: Emission Point Characteristics

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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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

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

#### Table: Storage Silos

## **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<br>Number | Associated<br>Emission Unit<br>Number | Opacity<br>Limit | PM Limit (each<br>emission point) | Authority for Requirement<br>(Construction Permit No.) |
|--------------------------|---------------------------------------|------------------|-----------------------------------|--|
| 12A                      | 12A                                   |                  |                                   | 15-A-559-S1  |
| 12B                      | 12B                                   |                  |                                   | 15-A-560-S1  |
| 12C                      | 12C                                   | 40% (1)          | 0.29 tons/yr.                     | 15-A-561-S1  |
| 12D                      | 12D                                   | (2)              | 0.1 gr/dscf <sup>(3)</sup>        | 15-A-562-S1  |
| 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 Requirements with Associated Monitoring and Recordkeeping**

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

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. The operating requirements and associated recordkeeping for this permit shall be:

For Lime and Dolomite Storage Silos EU-12A, EU-12B, EU-12C, and EU-12D

- A. Lime and Dolomite Storage Silos EU-12A, EU-12B, EU-12C, and EU-12D combined shall not store more than 80,000 tons of lime and dolomite per rolling 12-month period.
- B. The owner or operator shall record the amount of lime and dolomite, in tons, used 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, used in EU-12A, EU-12B, EU-12C, and EU-12D
- C. The Bin Vent Filters (CE-12A CE-12D) shall be operated and maintained according to manufacturer recommendations and specifications.
- D. The owner or operator shall maintain a record of all maintenance and inspection activities performed on the Bin Vent Filters (CE-12A CE-12D).

Authority for Requirement: DNR Construction Permits 15-A-559-S1, 15-A-560-S1, 15-A-561-S1, & 15-A-562-S1

For Carbon Storage Silos EU-39A and EU-39B

- 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 owner or operator shall record the amount of carbon, in tons, used 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, used in EU-39A and EU-39B
- C. The Bin Vent Filters (CE-39A and CE-39B) shall be operated and maintained according to manufacturer recommendations and specifications.
- D. The owner or operator shall maintain a record of all maintenance and inspection activities performed on the Bin Vent Filters (CE-39A 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.

|                             |  |  | Stack Characteristics |                      |                               |                          |                    |
|-----------------------------|--|--|-----------------------|----------------------|-------------------------------|--------------------------|--------------------|
| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Construction<br>Permit No.<br>(Authority for<br>Requirement) | Height<br>(feet)      | Diameter<br>(inches) | Exhaust<br>Flowrate<br>(scfm) | Exhaust<br>Temp.<br>(°F) | Discharge<br>Style |
| 12A                         | 12A                                      | 15-A-559-S1  | 36.5                  | 14                   | 1,530                         | Ambient                  | Horizontal         |
| 12B                         | 12B                                      | 15-A-560-S1  | 36.5                  | 14                   | 1,530                         | Ambient                  | Horizontal         |
| 12C                         | 12C                                      | 15-A-561-S1  | 36.5                  | 14                   | 1,530                         | Ambient                  | Horizontal         |
| 12D                         | 12D                                      | 15-A-562-S1  | 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         |

Table: Emission Point Characteristics

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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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

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

Table: Roadways

## **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 | Table | ad Emission | Limits |
|------------------------------------|-------|-------------|--------|
|------------------------------------|-------|-------------|--------|

| Emission        | Associated              | Onacity   | PM <sub>10</sub> Limit |      | Additional                      | Authority for<br>Requirement |  |
|-----------------|-------------------------|-----------|------------------------|------|---------------------------------|------------------------------|--|
| Point<br>Number | Emission Unit<br>Number | Limit     | Lb/hr                  | TPY  | Limits                          | (Construction<br>Permit No.) |  |
| 8               | 8                       | 0% (1)(2) | 3.09                   | 13.5 | Work<br>Practice <sup>(3)</sup> | 94-A-555-P4                  |  |
| 9               | 9                       | 0% (1)(2) | 1.84                   | 8.05 | Work<br>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  $11.39 \text{ g/m}^2$ .
- 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?<br>For opacity at the property line | Yes 🛛 No 🗌 |
| <b>Compliance Assurance Monitoring (CAM) Plan Required?</b>                                    | 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.

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

# Associated Equipment

Associated Emission Unit ID Numbers: See Table: Generators

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

Table: Generators

# **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<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Opacity<br>Limit | PM<br>Limit                                      | PM10<br>Limit                  | SO2<br>Limit                                   | Authority for<br>Requirement<br>(Construction<br>Permit No.) |
|-----------------------------|--|------------------|--|--------------------------------|--|--|
| 21                          | 21                                       | 10%              | 0.684<br>lb/hr &<br>0.1<br>gr/scf <sup>(1)</sup> | 0.684<br>lb/hr &<br>0.1 gr/scf | 1.14 lb/hr &<br>2.5<br>lb/MMBtu <sup>(2)</sup> | 96-A-1138  |
| 22                          | 22                                       | 10%              | 0.540<br>lb/hr &<br>0.1<br>gr/scf <sup>(1)</sup> | 0.540<br>lb/hr &<br>0.1 gr/scf | 3.02 lb/hr &<br>2.5<br>lb/MMBtu <sup>(2)</sup> | 96-A-1139  |
| 23                          | 23                                       | 10%              | 0.633<br>lb/hr &<br>0.1<br>gr/scf <sup>(1)</sup> | 0.633<br>lb/hr &<br>0.1 gr/scf | 0.19 lb/hr &<br>2.5<br>lb/MMBtu <sup>(2)</sup> | 96-A-1140  |
| 26                          | 26                                       | 10%              | 0.1<br>gr/scf                                    | N/A                            | 500 ppmv <sup>(3)</sup>                        | 98-A-973   |
| 31                          | 31                                       | 20%              | 5.50<br>lb/hr &<br>0.415<br>TPY                  | 5.50 lb/hr<br>& 0.415<br>TPY   | 2.5<br>lb/MMBtu <sup>(2)</sup>                 | 01-A-1228  |
| 33                          | 33                                       | 20%              | 2.82<br>lb/hr &<br>0.21<br>TPY                   | 2.82 lb/hr<br>& 0.21<br>TPY    | 2.5<br>lb/MMBtu <sup>(2)</sup>                 | 01-A-1230  |

Table: Generator Emission Limits

<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"

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | NOx<br>Limit                 | VOC Limit                 | CO Limit                 | Authority for<br>Requirement<br>(Construction<br>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<br>&<br>2.41 TPY | 1.00 lb/hr &<br>0.075 TPY | 8.5 lb/hr &<br>0.64 TPY  | 01-A-1228  |
| 33                          | 33                                       | 16.0 lb/hr<br>&<br>1.2 TPY   | 1.50 lb/hr &<br>0.12 TPY  | 9.65 lb/hr &<br>0.73 TPY | 01-A-1230  |

 Table: Generator Emission Limits (Cont.)

# 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)(iii) these compression ignition emergency engines, located at an area source, are existing stationary RICE as they were constructed prior to June 12, 2006.

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)(iii) this spark ignition emergency engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

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

# **Requirements for all Engines**

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

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Hours of<br>Operation<br>Limit   | Process<br>Throughput<br>Limit <sup>(1)</sup>  | Reporting &<br>Recordkeeping <sup>(2)</sup>   | Authority for<br>Requirements<br>(DNR Construction<br>Permit) |
|-----------------------------|--|--|--|---|---|
| 21                          | 21                                       | These sources<br>are limited to<br>not more than   | The diesel fuel<br>burned in these<br>units shall have a<br>maximum sulfur<br>content of 0.5 %<br>by weight. | The operator shall<br>maintain records<br>on site of the hours<br>of usage of these<br>fuel sources. A rolling  | 96-A-1138   |
| 22                          | 22                                       | 150 hr/yr of<br>usage for<br>periodic  |  |   | 96-A-1139   |
| 23                          | 23                                       | operational<br>testing.<br>Emergency use<br>is limited to the<br>amount of time<br>in which normal<br>electrical power<br>service has been<br>unavailable. |  | (rolled monthly) of<br>hours used shall be<br>calculated and<br>recorded monthly.<br>The operator shall<br>also maintain<br>records of fuel<br>sulfur content. <sup>(1)</sup> | 96-A-1140   |

Table: Generators-Operational Limits & Requirements

<sup>(1)</sup> Authority for requirement: 567 IAC 23.3(3)"b"(1) <sup>(2)</sup> Authority for requirement: 567 IAC 22.108(3)

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Hours of<br>Operation<br>Limit  | Process<br>Throughput<br>Limit   | Reporting &<br>Recordkeeping <sup>(1)</sup>  | Authority for<br>Requirements<br>(DNR Construction<br>Permit) |
|-----------------------------|--|---|--|--|---|
| 26                          | 26                                       | This source is<br>limited to not<br>more than 150<br>hr/yr of usage<br>for periodic<br>operational<br>testing.<br>Emergency use<br>is limited to the<br>amount of time<br>in which normal<br>electrical power<br>service has been<br>unavailable. | This source is<br>limited to the<br>combustion of<br>natural gas.  | N/A  | 98-A-973  |
| 31                          | 31                                       | A. These units  |  | A. A record of the<br>time of each use of<br>these units shall be<br>recorded. This  | 01-A-1228   |
| 33                          | 33                                       | operate more<br>than a<br>maximum of<br>150 hours per<br>twelve (12)<br>month period<br>rolled monthly.<br>B. The<br>operation of<br>these units is<br>limited to a<br>short weekly<br>test and<br>emergency<br>situations.                       | The fuel burned in<br>these units shall<br>be diesel fuel with<br>a maximum sulfur<br>content of 0.5 %<br>by weight. | include the time of<br>startup, the<br>duration of<br>operation, and the<br>reason for<br>operation.<br>B. A fuel<br>certification or<br>analysis shall be<br>kept for each fuel<br>delivery that shows<br>the sulfur content<br>of the fuel.<br>C. A record of the<br>rolling twelve-<br>month total of the<br>hours of usage,<br>rolled monthly. | 01-A-1230   |

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

<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.

| Emission<br>Point<br>Number | Emission<br>Unit<br>Number | Construction<br>Permit Number<br>(Authority for<br>Requirement) | Height<br>(ft.) | Diameter<br>(inches) | Temp<br>(°F) | Flowrate    | Discharge<br>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<br>Vertical or<br>Horizontal |
| 33                          | 33                         | 01-A-1230   | 12.1            | 6                    | 1025         | 960 scfm    | Obstructed<br>Vertical                  |

#### Table: Generators-Emission Point Characteristics

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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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.

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

#### Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 42

Emission Unit vented through this Emission Point: 42Emission Unit Description:WAC Emergency GeneratorRaw Material/Fuel:DieselRated Capacity:650 kW (739 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):         | 40% <sup>(1)</sup>                  |
| Authority for Requirement: | 567 IAC 23.3(2)"d"                  |
|                            | DNR Construction Permit 19-A-069-S1 |

<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).

| Pollutant: Particulate Matter | $(PM_{10})$                         |
|-------------------------------|-------------------------------------|
| Emission Limit(s):            | 0.11 lb/hr                          |
| Authority for Requirement:    | DNR Construction Permit 19-A-069-S1 |

| Pollutant: Particulate Matter | : (PM)                              |
|-------------------------------|-------------------------------------|
| Emission Limit(s):            | 0.1 gr/dscf                         |
| Authority for Requirement:    | 567 IAC 23.3(2)"a"                  |
|                               | DNR Construction Permit 19-A-069-S1 |

| Pollutant: Sulfur Dioxide (S | O <sub>2</sub> )                    |
|------------------------------|-------------------------------------|
| Emission Limit(s):           | 2.5 lbs/MMBtu                       |
| Authority for Requirement:   | 567 IAC 23.3(3)"b"                  |
|                              | DNR Construction Permit 19-A-069-S1 |

# **NESAHP** Applicability

The emergency engine 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)(iii) this compression ignition emergency engine, located at an area 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 63.6603, 63.6625, 63.6640 and Tables 2d 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. Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), 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 nonresettable 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 2d 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 2d. (See Footnote 2 of Table 2d for more information.)

Authority for Requirement:40 CFR 63 Subpart ZZZZ567 IAC 23.1(4)"cz"

# **Operational Requirements with Associated Monitoring and Recordkeeping**

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

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. The operating requirements and associated recordkeeping for this permit shall be:

- A. This engine is limited to operating a maximum of 200 hours in any rolling 12-month period.
- B. In accordance with 40 CFR §63.6640(f), the facility shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures.
- C. This engine is limited to operate as an emergency stationary internal combustion engine as defined in 40 CFR §63.6675 and in accordance with 40 CFR §63.6640(f). In accordance with 40 CFR §63.6640(f)(1), there is no time limit on the use of the engine in emergency situations provided the requested fuel usage limit established in Condition 5.A. is not exceeded. In accordance with 40 CFR §63.6640(f)(2), the engine is limited to operate a maximum of 100 hours per calendar year for maintenance checks, readiness testing, emergency demand response, and periods of deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- D. In accordance with 40 CFR §63.6640(f)(4), the engine is also allowed to operate up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR §63.6640(f)(2). Except as provided in 40 CFR §63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise

supply power as part of a financial arrangement with another entity.

- E. The engine shall only combust diesel fuel. The maximum sulfur content of the diesel fuel burned in the engine shall not exceed 0.5% by weight. The owner or operator of the engine shall comply with these requirements listed by the facility keeping a fuel certificate from the supplier for the diesel fuel used in the engine.
- F. In accordance with 40 CFR §63.6604(b), when the engine is operating as specified in 40 CFR §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
  - a. The facility shall keep a fuel certificate from the supplier stating the diesel fuel meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel if the facility decides to supply power as part of a financial arrangement with another entity for a non-emergency situation.
- G. In accordance with 40 CFR §63.6625(e), the facility shall operate and maintain the stationary RICE 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.
- H. In accordance with 40 CFR §63.6655(e), the facility shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE according to your own maintenance plan if you own or operate any of the following stationary RICE.
- I. In accordance with 40 CFR §63.6603, §63.6625(h), and Table 2d of Subpart ZZZZ, the owner or operator must comply with the following requirements for this engine and record annually:
  - i. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the applicable non-startup emission limitations apply.
  - ii. Change oil and filter every 500 hours of operation or annually, whichever comes first;<sup>(1)</sup>
  - iii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - iv. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
  - <sup>1</sup> The facility has the option to utilize an oil analysis program as described in 40 CFR §63.6625(h)(i) in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ. The oil analysis must be done on the same frequency as the specified oil change requirement.
- J. The owner or operator shall maintain the following monthly records:
  - i. the number of hours that the engine operated for maintenance checks, readiness testing, emergency demand response, and periods of deviation of voltage or frequency per 40 CFR §63.6640(f)(2);
  - ii. the number of hours the engine operated for allowed non-emergency operations per 40 CFR §63.6640(f)(4);
  - iii. the number of hours the engine operated for emergency operations;
  - iv. the total number of hours the engine operated; and

- v. the rolling 12-month total amount of the number of hours the engine operated.
- K. The owner or operator shall maintain the following annual records:
  - a. the number of hours the engine operated for maintenance checks and readiness testing maintenance checks, readiness testing, emergency demand response, and periods of deviation of voltage or frequency per 40 CFR §63.6640(f)(2); and
  - b. the number of hours the engine operated for allowed non-emergency operations per 40 CFR §63.6640(f)(4);
  - c. the total number of hours the engine operated for emergency operations.

Authority for Requirement: DNR Construction Permit 19-A-069-S1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

| Stack Height, (ft, from the ground): | 14.2                                |
|--------------------------------------|-------------------------------------|
| Stack Opening, (inches, dia.):       | 10                                  |
| Exhaust Flow Rate (scfm):            | 5,085                               |
| Exhaust Temperature (°F):            | 1,011                               |
| Discharge Style:                     | Vertical, Unobstructed              |
| Authority for Requirement:           | DNR Construction Permit 19-A-069-S1 |

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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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 🖂 |

#### Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 44

Emission Unit vented through this Emission Point: 44Emission Unit Description:R&D Emergency Lighting GeneratorRaw Material/Fuel:DieselRated Capacity:302 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):         | $40\%^{(1)}$       |
| Authority for Requirement: | 567 IAC 23.3(2)"d' |

(1) 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).

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

Pollutant: Sulfur Dioxide (SO2)Emission Limit(s):500 ppmvAuthority for Requirement:567 IAC 23.3(3)"b"

# **NSPS/NESHAP Applicability**

The emergency engine 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)(2)(ii) this compression ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for this emergency engine under subpart ZZZZ.

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

# NSPS Subpart IIII Requirements

# For 2007 and later model year emergency (Except FP) CI engines with Disp. < 30 l/cyl constructed after 7/11/2005 and manufactured after 4/1/2006:

| tanuarus in gra                   | IIIS/K W -III (graiiis/TII   | -m).             |                |           |             |         |             |
|-----------------------------------|------------------------------|------------------|----------------|-----------|-------------|---------|-------------|
| Engine<br>Displacement<br>(l/cyl) | Maximum Engine<br>Power      | Model<br>Year(s) | NMHC + NOx     | СО        | РМ          | Opacity | Rule<br>Ref |
|                                   | kW < 8                       | 2007             |                | 80(60)    | 0.80 (0.60) |         | (2)         |
|                                   | (HP < 11)                    | 2008+            |                | 8.0 (0.0) | 0.40 (0.30) |         | (3)         |
|                                   | $8 \le kW < 19$              | 2007             | 75(56)         | 66(10)    | 0.80 (0.60) |         | (2)         |
|                                   | $(11 \le HP < 25)$           | 2008+            | 7.5 (5.0)      | 0.0 (4.9) | 0.40 (0.30) |         | (3)         |
|                                   | $19 \le kW < 37$             | 2007             |                | 55(11)    | 0.60 (0.45) |         | (2)         |
|                                   | $(25 \le \text{HP} < 50)$    | 2008+            |                | 3.3 (4.1) | 0.30 (0.22) |         | (3)         |
|                                   | $37 \le kW < 75$             | 2007             | 7.5 (5.6)      | 50(27)    | 0.40 (0.20) |         |             |
|                                   | $(50 \le HP < 100)$          | 2008+            | 4.7 (3.5)      | 5.0 (5.7) | 0.40 (0.30) |         |             |
|                                   | $75 \le kW < 130$            |                  |                | 50(27)    | 0.20(0.22)  | (1)     |             |
|                                   | $(100 \le \text{HP} < 175)$  |                  |                | 5.0 (5.7) | 0.30 (0.22) |         |             |
| Disp. < 10                        | $130 \le kW < 225$           |                  |                |           |             |         |             |
|                                   | $(175 \le \text{HP} < 302)$  |                  | 4.0.(2.0)      |           |             |         | (2)         |
|                                   | $225 \le kW < 450$           | 2007             | 4.0 (3.0)      |           |             |         |             |
|                                   | $(302 \le HP < 604)$         | 2007+            |                | 35(26)    | 0.20 (0.15) |         |             |
|                                   | $450 \le kW < 560$           |                  |                | 5.5 (2.0) | 0.20 (0.13) |         |             |
|                                   | $(604 \le HP < 751)$         |                  |                |           |             |         |             |
|                                   | $560 < kW \le 2237$          |                  | 61(18)         |           |             |         |             |
|                                   | $(751 < \text{HP} \le 3000)$ |                  | 0.4 (4.8)      |           |             |         |             |
|                                   | 2237 < 1-W                   | 2007 -           | HC: 1.3 (1.0)  | 11.4      | 0.54 (0.40  |         | (4)         |
|                                   | (2000 > HD)                  | 2010             | NOx: 9.2 (6.9) | (8.5)     | 0.34 (0.40  | -       |             |
|                                   | (3000 < 111)                 | 2011+            | 6.4 (4.8)      | 3.5 (2.6) | 0.20 (0.15) | (1)     | (2)         |

Emission Standards (for engines with displacement (L/cyl) < 10):

According to 40 CFR 60.4205(b) and 4202, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

<sup>(1)</sup> Exhaust opacity must not exceed: 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.

<sup>(2)</sup> 40 CFR 89.112 and 40 CFR 89.113.

<sup>(3)</sup> Table 2 to Subpart IIII and 40 CFR 1039.105.

<sup>(4)</sup> Table 1 to Subpart IIII.

# Fuel Requirements (if using diesel):

You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 1090.305.

### Compliance Requirements:

- 1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
  - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
  - b) Changing only those emission-related settings that are permitted by the manufacturer; and
  - c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
- 2. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).
- 3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

| Maximum Engine Power | Initial Test  | Subsequent Test                                     |
|----------------------|---|---|
| HP < 100             | Within 1 year of non-<br>permitted action <sup>(1)</sup>                      | Not required  |
| $100 \le HP \le 500$ | Within 1 year of engine<br>startup,<br>or non-permitted action <sup>(1)</sup> | Not required  |
| 500 < HP             | Within 1 year of engine<br>startup,<br>or non-permitted action <sup>(1)</sup> | Every 8,760 hours or 3 years, whichever comes first |

<sup>(1)</sup> Non-permitted action means that you do not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer.

**Operating and Recordkeeping Requirements** 

If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 60.4214(b).

| Engine power                          | Starting model year |
|---------------------------------------|---------------------|
| $19 \le KW < 56 (25 \le HP < 75)$     | 2013                |
| $56 \le KW < 130 \ (75 \le HP < 175)$ | 2012                |
| $130 \le KW (175 \le HP)$             | 2011                |

- 2. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
- 3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
- 4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

### **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 🖂 |

### Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 45

Emission Unit vented through this Emission Point: 45Emission Unit Description:River Treatment Plant Emergency GeneratorRaw Material/Fuel:DieselRated Capacity:80 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):         | $40\%^{(1)}$       |
| Authority for Requirement: | 567 IAC 23.3(2)"d' |

(1) 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).

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

Pollutant: Sulfur Dioxide (SO2)Emission Limit(s):500 ppmvAuthority for Requirement:567 IAC 23.3(3)"b"

# **NSPS/NESHAP Applicability**

The emergency engine 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)(2)(ii) this compression ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for this emergency engine under subpart ZZZZ.

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

# NSPS Subpart IIII Requirements

# For 2007 and later model year emergency (Except FP) CI engines with Disp. < 30 l/cyl constructed after 7/11/2005 and manufactured after 4/1/2006:

| stanuarus in gra                  | IIIS/K W -III (graiiis/TIF      | -m).             |                                     |           |             |         |             |
|-----------------------------------|---------------------------------|------------------|-------------------------------------|-----------|-------------|---------|-------------|
| Engine<br>Displacement<br>(l/cyl) | Maximum Engine<br>Power         | Model<br>Year(s) | NMHC + NOx                          | СО        | РМ          | Opacity | Rule<br>Ref |
|                                   | kW < 8                          | 2007             |                                     | 80(60)    | 0.80 (0.60) |         | (2)         |
|                                   | (HP < 11)                       | 2008+            |                                     | 8.0 (0.0) | 0.40 (0.30) |         | (3)         |
|                                   | $8 \le kW < 19$                 | 2007             | 75(56)                              | 66(10)    | 0.80 (0.60) |         | (2)         |
|                                   | $(11 \le HP < 25)$              | 2008+            | 7.3 (3.0)                           | 0.0 (4.9) | 0.40 (0.30) |         | (3)         |
|                                   | $19 \le kW < 37$                | 2007             |                                     | 55(41)    | 0.60 (0.45) |         | (2)         |
|                                   | $(25 \le \text{HP} < 50)$       | 2008+            |                                     | 5.5 (4.1) | 0.30 (0.22) |         | (3)         |
|                                   | $37 \le kW < 75$                | 2007             | 7.5 (5.6)                           | 50(27)    | 0.40(0.20)  |         |             |
|                                   | $(50 \le \text{HP} < 100)$      | 2008+            | 4.7 (3.5)                           | 5.0 (5.7) | 0.40 (0.30) |         |             |
|                                   | $75 \le kW < 130$               |                  |                                     | 50(27)    | 0.20 (0.22) | (1)     |             |
|                                   | $(100 \le \text{HP} < 175)$     |                  |                                     | 5.0 (5.7) | 0.30 (0.22) |         |             |
| Disp. < 10                        | $130 \le kW < 225$              |                  |                                     |           |             |         |             |
|                                   | $(175 \le \text{HP} < 302)$     |                  | 4.0.(2.0)                           |           |             |         | (2)         |
|                                   | $225 \le kW < 450$              | 2007             | 4.0 (3.0)                           |           |             |         | . ,         |
|                                   | $(302 \le HP < 604)$            | 2007+            |                                     | 25 (26)   | 0.20 (0.15) |         |             |
|                                   | $450 \le kW < 560$              |                  |                                     | 3.3 (2.0) | 0.20 (0.15) |         |             |
|                                   | $(604 \le HP < 751)$            |                  |                                     |           |             |         |             |
|                                   | $560 < kW \le 2237$             |                  | $\epsilon \Lambda (\Lambda \Theta)$ |           |             |         |             |
|                                   | $(751 < \text{HP} \le 3000)$    |                  | 0.4 (4.8)                           |           |             |         |             |
|                                   | 2227 < 1                        | 2007 -           | HC: 1.3 (1.0)                       | 11.4      | 0.54 (0.40  |         | (4)         |
|                                   | $\frac{2237 < KW}{(2000 < UD)}$ | 2010             | NOx: 9.2 (6.9)                      | (8.5)     | 0.34 (0.40  | -       |             |
|                                   | (5000 < HP)                     | 2011+            | 6.4 (4.8)                           | 3.5 (2.6) | 0.20 (0.15) | (1)     | (2)         |

Emission Standards (for engines with displacement (L/cyl) < 10):

According to 40 CFR 60.4205(b) and 4202, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

(1) Exhaust opacity must not exceed: 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.

<sup>(2)</sup> 40 CFR 89.112 and 40 CFR 89.113.

<sup>(3)</sup> Table 2 to Subpart IIII and 40 CFR 1039.105.

<sup>(4)</sup> Table 1 to Subpart IIII.

# Fuel Requirements (if using diesel):

You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 1090.305.

# Compliance Requirements:

- 4. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
  - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
  - b) Changing only those emission-related settings that are permitted by the manufacturer; and
  - c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
- 5. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).
- 6. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

| Maximum Engine Power        | Initial Test                           | Subsequent Test              |
|-----------------------------|--|------------------------------|
| HP < 100                    | Within 1 year of non-                  | Not required                 |
|                             | permitted action (1)                   |                              |
| $100 \le \text{HP} \le 500$ | Within 1 year of engine                | Not required                 |
|                             | startup,                               |                              |
|                             | or non-permitted action <sup>(1)</sup> |                              |
| 500 < HP                    | Within 1 year of engine                | Every 8,760 hours or 3       |
|                             | startup,                               | years, whichever comes first |
|                             | or non-permitted action <sup>(1)</sup> |                              |

<sup>(1)</sup> Non-permitted action means that you do not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer.

**Operating and Recordkeeping Requirements** 

5. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 60.4214(b).

| Engine power                          | Starting model year |
|---------------------------------------|---------------------|
| $19 \le KW < 56 (25 \le HP < 75)$     | 2013                |
| $56 \le KW < 130 \ (75 \le HP < 175)$ | 2012                |
| $130 \le KW (175 \le HP)$             | 2011                |

- 6. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
- 7. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
- 8. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

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

#### **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 🖂 |

### Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 46

Emission Unit vented through this Emission Point: 46Emission Unit Description:Sewage Lifting Station Emergency GeneratorRaw Material/Fuel:DieselRated Capacity:80 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):         | $40\%^{(1)}$       |
| Authority for Requirement: | 567 IAC 23.3(2)"d' |

(1) 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).

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

Pollutant: Sulfur Dioxide (SO2)Emission Limit(s):500 ppmvAuthority for Requirement:567 IAC 23.3(3)"b"

# **NSPS/NESHAP Applicability**

The emergency engine 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)(2)(ii) this compression ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for this emergency engine under subpart ZZZZ.

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

# NSPS Subpart IIII Requirements

# For 2007 and later model year emergency (Except FP) CI engines with Disp. < 30 l/cyl constructed after 7/11/2005 and manufactured after 4/1/2006:

| stanuarus in gra                  | IIIS/K VV -III (graiiis/111                                  | -m).             |                |                          |             |         |             |
|-----------------------------------|--|------------------|----------------|--------------------------|-------------|---------|-------------|
| Engine<br>Displacement<br>(l/cyl) | Maximum Engine<br>Power                                      | Model<br>Year(s) | NMHC + NOx     | СО                       | РМ          | Opacity | Rule<br>Ref |
|                                   | kW < 8   | 2007             |                | 80(60)                   | 0.80 (0.60) |         | (2)         |
|                                   | (HP < 11)  | 2008+            |                | 8.0 (0.0)                | 0.40 (0.30) |         | (3)         |
|                                   | $8 \le kW < 19$  | 2007             | 75(56)         | $\epsilon \epsilon (10)$ | 0.80 (0.60) |         | (2)         |
|                                   | $(11 \le HP < 25)$   | 2008+            | 7.5 (5.6)      | 0.0 (4.9)                | 0.40 (0.30) |         | (3)         |
|                                   | $19 \le kW < 37$   | 2007             |                | 55(41)                   | 0.60 (0.45) |         | (2)         |
|                                   | $(25 \le \text{HP} < 50)$                                    | 2008+            |                | 5.5 (4.1)                | 0.30 (0.22) |         | (3)         |
|                                   | $37 \le kW < 75$   | 2007             | 7.5 (5.6)      | 50(27)                   | 0.40 (0.20) |         |             |
|                                   | $(50 \le \text{HP} < 100)$                                   | 2008+            | 4.7 (3.5)      | 5.0 (5.7)                | 0.40 (0.30) |         |             |
|                                   | $75 \le kW < 130$  |                  |                | 5.0 (2.7)                | 0.20 (0.22) | (1)     |             |
|                                   | $(100 \le \text{HP} < 175)$                                  |                  |                | 5.0 (3.7)                | 0.30 (0.22) |         |             |
| Disp. < 10                        | $130 \le kW < 225$   |                  |                |                          |             |         |             |
|                                   | $(175 \le \text{HP} < 302)$                                  |                  | 4.0.(2.0)      |                          |             |         | (2)         |
|                                   | $225 \le kW < 450$   | 2007             | 4.0 (3.0)      |                          |             |         | . ,         |
|                                   | $(302 \le HP < 604)$   | 2007+            |                | 25(26)                   | 0.20 (0.15) |         |             |
|                                   | $450 \le kW < 560$   |                  |                | 3.5 (2.0)                | 0.20 (0.15) |         |             |
|                                   | $(604 \le HP < 751)$   |                  |                |                          |             |         |             |
|                                   | $560 < kW \le 2237$  |                  | ( A (A Q))     |                          |             |         |             |
|                                   | $(751 < \text{HP} \le 3000)$                                 |                  | 0.4 (4.8)      |                          |             |         |             |
|                                   | 2227 < 1   | 2007 -           | HC: 1.3 (1.0)  | 11.4                     | 0 54 (0 40  |         | (4)         |
|                                   | $\begin{bmatrix} 2237 < KW \\ (2000 < LID) \end{bmatrix}$ 20 | 2010             | NOx: 9.2 (6.9) | (8.5)                    | 0.34 (0.40  | -       |             |
|                                   | (3000 < HP)  | 2011+            | 6.4 (4.8)      | 3.5 (2.6)                | 0.20 (0.15) | (1)     | (2)         |

Emission Standards (for engines with displacement (L/cyl) < 10):

According to 40 CFR 60.4205(b) and 4202, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

<sup>(1)</sup> Exhaust opacity must not exceed: 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.

<sup>(2)</sup> 40 CFR 89.112 and 40 CFR 89.113.

<sup>(3)</sup> Table 2 to Subpart IIII and 40 CFR 1039.105.

<sup>(4)</sup> Table 1 to Subpart IIII.

# Fuel Requirements (if using diesel):

You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 1090.305.

# Compliance Requirements:

- 7. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
  - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
  - b) Changing only those emission-related settings that are permitted by the manufacturer; and
  - c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
- 8. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).
- 9. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

| Maximum Engine Power        | Initial Test                           | Subsequent Test              |
|-----------------------------|--|------------------------------|
| HP < 100                    | Within 1 year of non-                  | Not required                 |
|                             | permitted action <sup>(1)</sup>        |                              |
| $100 \le \text{HP} \le 500$ | Within 1 year of engine                | Not required                 |
|                             | startup,                               |                              |
|                             | or non-permitted action <sup>(1)</sup> |                              |
| 500 < HP                    | Within 1 year of engine                | Every 8,760 hours or 3       |
|                             | startup,                               | years, whichever comes first |
|                             | or non-permitted action <sup>(1)</sup> |                              |

<sup>(1)</sup> Non-permitted action means that you do not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer.

**Operating and Recordkeeping Requirements** 

9. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 60.4214(b).

| Engine power                          | Starting model year |
|---------------------------------------|---------------------|
| $19 \le KW < 56 (25 \le HP < 75)$     | 2013                |
| $56 \le KW < 130 \ (75 \le HP < 175)$ | 2012                |
| $130 \le KW (175 \le HP)$             | 2011                |

- 10. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
- 11. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
- 12. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

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

#### **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 🖂 |

Associated Equipment

Associated Emission Unit ID Number: 6

Emission Unit vented through this Emission Point: 6Emission Unit Description:Oxy-Fuel Caster TorchRaw Material/Fuel:Natural Gas and OxygenRated 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-P4                                       |
|   | 567 IAC 23.3(2)"d"   |
| <sup>(1)</sup> This opacity limit applies | s to the LMF Meltshop Monitor from which the emissions from this |
| unit exhaust.                             |  |

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.05 gr/dscf Authority for Requirement: DNR PSD Permit 94-A-553-P4 567 IAC 23.4(6)

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppm<sub>v</sub> Authority for Requirement: DNR PSD Permit 94-A-553-P4 567 IAC 23.3(3)"e"

#### **Operating Limits with Associated Monitoring and Recordkeeping**

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

All records as required by this permit shall be available 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. The operating requirements and associated recordkeeping for this permit shall be:

A. This unit shall only combust natural gas or renewable natural gas and oxygen.

(1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.

- 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.
  - (1) At the end of each working day, record the number of cuts made over the previous day.
- E. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:
  - (1) The date and time any inspection and/or maintenance was performed on the equipment;
  - (2) Any issues identified during the inspection and the date each issue was resolved;
  - (3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR PSD Permit 94-A-553-P4

### **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 🔀 |

Associated Equipment

Associated Emission Unit ID Numbers: 10

Emission Unit vented through this Emission Point: 10Emission Unit Description:<br/>Raw Material/Fuel:Steel Scrap Cutting Operations (fugitive)<br/>Oxy-FuelRated Capacity:Natural Gas or RNG 135 CFH, Oxygen 220 CFH for preheating<br/>and 1500 CFH for cutting, cutting speed: 100 in/min

# **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-P2 567 IAC 23.3(2)"d"

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

| Pollutant: Particulate Matter | (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-P2 |

| Pollutant: Particulate Matter | (PM)                       |
|-------------------------------|----------------------------|
| Emission Limit(s):            | 0.05 gr/dscf               |
| Authority for Requirement:    | DNR PSD Permit 94-A-557-P2 |
|                               | 567 IAC 23.4(6)            |

| Pollutant: Sulfur Dioxide (Se | O <sub>2</sub> )           |
|-------------------------------|----------------------------|
| Emission Limit(s):            | 500 ppm <sub>v</sub>       |
| Authority for Requirement:    | DNR PSD Permit 94-A-557-P2 |
|                               | 567 IAC 23.3(3)"e"         |

# **Operating Limits with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be available 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. The operating requirements and associated recordkeeping for this permit shall be:

- A. This unit shall only combust natural gas or renewable natural gas as a fuel source.
  - (1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.
- B. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:
  - (1) The date and time any inspection and/or maintenance was performed on the equipment;
  - (2) Any issues identified during the inspection and the date each issue was resolved;
  - (3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR PSD Permit 94-A-557-P2

### **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?<br>For opacity at the property line | 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.

# Associated Equipment

| 13<br>CE 13<br>Low NO <sub>x</sub> /CO Burners & Burner Internal Flue Gas<br>Recirculation (CE 13) |
|--|
|  |
| -  |

| Emission Unit vented through | n 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 or RNG  |
| 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 | $(PM_{10})$  |
|-------------------------------|--|
| Emission Limit(s):            | 6.96 TPY <sup>(1)</sup> and 0.0041 lb/MMBtu                    |
| Authority for Requirement:    | DNR PSD Permit 94-A-560-P6                                     |
| 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-P6                                     |
| Pollutant: Sulfur Diovide (SC |  |
| Emission Limit(s):            | $^{(2)}$ 2 37 TPV $^{(1)}$ and 0 0014 lb/MMBtu                 |
| Authority for Paquirement:    | 2.57 III and $0.0014$ 10/MiNIDiu<br>DNP DSD Parmit 0/ A 560 P6 |
| Autionity for Requirement.    | DIAR I SD I enint 94-A-300-10                                  |
| Pollutant: Nitrogen Oxides (N | NOx)   |
| BACT Emission Limit(s):       | 390.47 TPY <sup>(1)</sup> and 0.23 lb/MMBtu                    |
| Authority for Requirement:    | DNR PSD Permit 94-A-560-P6                                     |
| Pollutant: Volatile Organic C | 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-P6                                     |

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-P6 <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-P6 |
|                               | 567 IAC 23.3(2)"d"                  |
|                               |                                     |
| Pollutant: Particulate Matter | · (PM <sub>10</sub> )               |
| BACT Emission Limit(s):       | 1.59 lb/hr                          |
| Authority for Requirement:    | DNR Construction Permit 94-A-560-P6 |
|                               |                                     |
| Pollutant: Particulate Matter | · (PM)                              |
| BACT Emission Limit(s):       | 0.1 gr/dscf                         |
| Authority for Requirement:    | DNR Construction Permit 94-A-560-P6 |
|                               | 567 IAC 23 3(2)"a"                  |
|                               | 507 m c 25.5(2) u                   |
| Pollutant: Sulfur Dioxide (SO | $O_{2}$                             |
| Emission Limit(s):            | 0.54 lb/hr                          |
| Authority for Requirement:    | DNR Construction Permit 94-A-560-P6 |
|                               |                                     |
| Pollutant: Nitrogen Oxides (1 | NOx)                                |
| BACT Emission Limit(s):       | 89.15 lb/hr                         |
| Authority for Requirement:    | DNR Construction Permit 94-A-560-P6 |
|                               |                                     |
| Pollutant: Carbon Monoxide    | (CO)                                |
| BACT Emission Limit(s):       | 8.22 lb/hr                          |
| Authority for Requirement:    | DNR Construction Permit 94-A-560-P6 |
| J 1                           |                                     |

# **Operational Requirements with Associated Monitoring and Recordkeeping**

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

All records as required by this permit shall be available 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. The operating requirements and associated recordkeeping for this permit shall be:

A. This unit shall only combust natural gas or renewable natural gas.

(1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.

| Heating Zone               | Number of Burners | Individual Burner Rating<br>(MMBTU/hr) |
|----------------------------|-------------------|--|
| 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                                   |

B. The emission unit has the following heating zones and burners:

- C. 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.
- D. The hours of operation shall be recorded monthly.
- E. he 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.
- F. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:
  - (1) The date and time any inspection and/or maintenance was performed on the equipment;
  - (2) Any issues identified during the inspection and the date each issue was resolved;
  - (3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR Construction Permit 94-A-560-P6

# **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-P6 |

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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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 🖂 |

Associated Equipment

Associated Emission Unit ID Numbers:14.1, 14.2Emissions Control Equipment ID Numbers:14.11, 14.12, 14.21, 14.22Emissions Control Equipment Description:Low NOx Burners, Internal Flue Gas Recirculation,

Emission Unit vented through this Emission Point: 14.1Emission Unit Description:Temperature Retention UnitRaw Material/Fuel:Natural Gas or RNGRated Capacity:12.95 MMBtu/hr

Emission Unit vented through this Emission Point: 14.2Emission Unit Description:Temperature Retention UnitRaw Material/Fuel:Natural Gas or RNGRated 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-P5 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: DNR PSD Permit 94-A-561-P5 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppm<sub>v</sub> Authority for Requirement: DNR PSD Permit 94-A-561-P5 567 IAC 23.3(3)"e"

# **Operational Limits with Associated Monitoring and Recordkeeping**

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

All records as required by this permit shall be available 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. The operating requirements and associated recordkeeping for this permit shall be:

A. This unit shall only combust natural gas or renewable natural gas.

- (1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.
- B. The maximum natural gas usage for each burner shall not exceed 12,950 standard cubic feet per hour.
  - (1) At the end of each working day, record the number of hours the temperature retention units operated over the previous day.
  - (2) At the end of each working day, record the amount of natural gas consumed by the temperature retention units over the previous day.
  - (3) 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.
- C. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:
  - (1) The date and time any inspection and/or maintenance was performed on the equipment;
  - (2) Any issues identified during the inspection and the date each issue was resolved;
  - (3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR PSD Permit 94-A-561-P5

#### **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-P5

#### **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

Emission Unit vented through this Emission Point: 19Emission Unit Description:Outside Alloy Storage Bins (fugitive)Raw Material/Fuel:AlloysRated 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% (1)                  |
| Authority for Requirement: | DNR PSD Permit 95-A-775 |
|                            | 567 IAC 23.3(2)"d"      |
| (1) 771 2 2 12 2 1         |                         |

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

Pollutant: Particulate Matter (PM10)BACT Emission Limit(s):0.192 lb/hr and 0.84 TPYAuthority for Requirement:DNR PSD Permit 95-A-775

Pollutant: Particulate Matter (PM)BACT Emission Limit(s):0.192 lb/hr and 0.84 TPYAuthority 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?<br>For opacity at the property line | 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.

# **Emission Point ID Number: 20**

#### Associated Equipment

Associated Emission Unit ID Numbers: 20

Emission Unit vented through this Emission Point: 20Emission Unit Description:Alloy & Desulfurization SystemRaw Material/Fuel:AlloysRated 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 🖂 |

# **Emission Point ID Number: 25**

Associated Equipment

Associated Emission Unit ID Numbers: 25

Emission Unit vented through this Emission Point: 25Emission Unit Description:Reheat Furnace Emergency PumpRaw Material/Fuel:Diesel FuelRated Capacity:420 BHP

# **Applicable Requirements**

<u>Emission Limits (lb/hr, gr./dscf, lb/MMBtu, % opacity, etc.)</u> The emissions from this emission point shall not exceed the levels specified below.

| Pollutant: Opacity  | 20 %  |
|---|---|
| Emission Limit(s):  | DNR Construction Permit 01-A-1229   |
| Authority for Requirement:  | 567 IAC 23.3(2)"d"  |
| Pollutant: Particulate Matter   | (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: Particulate Matter<br>Emission Limit(s):<br>Authority for Requirement: | 1.0 lb/hr and 0.075 TPY<br>DNR Construction Permit 01-A-1229                  |
| Pollutant: Sulfur Oxides (SO<br>Emission Limit(s):<br>Authority for Requirement:  | 2)<br>2.5 lb/MMBtu<br>DNR Construction Permit 01-A-1229<br>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 C   | 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 TPYAuthority 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 an area 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 2d 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

- 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 2d 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 2d. (See Footnote 2 of Table 2d 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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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 🖂 |

# **Emission Point ID Number: 27**

Associated Equipment

Associated Emission Unit ID Numbers: 27

Emission Unit vented through this Emission Point: 27Emission Unit Description:Torch Cutting Table (fugitive)Raw Material/Fuel:Natural Gas, RNG, Oxygen, and Ambient AirRated Capacity:75 CFH Natural Gas, 800 CFH Oxygen, and 400 CFH Ambient<br/>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-P3 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.

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

All records as required by this permit shall be available 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.

A. The Torch Cutting Table burners shall only combust natural gas or renewable natural gas.
 (1) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.

B. This unit is limited to the operation of two (2) burners at any one time.

C. The maximum natural gas usage for each Torch Cutting Table burner shall not exceed 75 standard cubic feet per hour.

(1) At the end of each working day, record the number of hours the Torch Cutting Table operated over the previous day.

(2) At the end of each working day, record the amount of natural gas consumed by the Torch Cutting Table over the previous day.

(3) 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 14 working days after the end of each month.

D. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:

(1) The date and time any inspection and/or maintenance was performed on the equipment;

(2) Any issues identified during the inspection and the date each issue was resolved;(3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR PSD Permit 99-A-362-P3

#### **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 99-A-362-P3

#### **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 🖂 |

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

Associated Equipment

Associated Emission Unit ID Numbers: 34

Emission Unit vented through this Emission Point: 34Emission Unit Description:Ink Stencil MachineRaw Material/Fuel:Water Based InkRated 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

<u>Monitoring Requirements</u> *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 🔀 |

# **Emission Point ID Number: 35**

Associated Equipment

Associated Emission Unit ID Numbers: 35

Emission Unit vented through this Emission Point: 35Emission Unit Description:Raw Material/Fuel:Rated Capacity:Quality Control Hand Scarfing (fugitive)Natural Gas or RNG40 scf/hr each torch (3 torches)

# **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-P1 567 IAC 23.3(2)"d"

(1) 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): 0.25 lb/hr; 0.05 gr/dscf Authority for Requirement: DNR Construction Permit 08-A-518-P1

#### **Operationing Requirements with Associated Monitoring and Recordkeeping**

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

All records as required by this permit shall be available 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. The operating requirements and associated recordkeeping for this permit shall be:

A. The following work practices are BACT:

- (1) Hand scarfing is limited to a maximum of three (3) torches.
- (2) The torches shall only be supplied natural gas or renewable natural gas and oxygen to fuel combustion.
  - (a) If delivery of RNG is other than through a pipeline, documentation of a certification of the RNG to pipeline grade shall be maintained. This can take the form of a chemical analysis, a certification from the supplier or other equivalent documentation.

- (3) The natural gas usage for each torch shall not exceed 40 standard cubic feet per hour.
  - (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. A maximum of 525,600 tons of steel shall be hand scarfed per twelve month rolling period.
  - (1) At the end of each working day, record the amount of steel (in tons) that was hand scarfed.
  - (2) Monthly, calculate the amount of steel that was hand scarfed that month and update the twelve month rolling total.
- C. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:
  - (1) The date and time any inspection and/or maintenance was performed on the equipment;
  - (2) Any issues identified during the inspection and the date each issue was resolved;
  - (3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR Construction Permit 08-A-518-P1

#### **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 🖂 |

# Emission Point ID Numbers: 36A, 36B, & 43

#### Associated Equipment

| Associated Emission Unit ID Numbers:     | See Table: Vacuum Tank Degasser |
|--|---------------------------------|
| Emissions Control Equipment Description: | See Table: Vacuum Tank Degasser |

#### Associated Emission Emission Control Control Rated Emission Raw Point Unit Equipment Equipment Capacity Unit Material/Fuel Description Description (tons/hr) Number Number Number CS2 Fabric Filter 36A Vacuum Condenser CS3 Tank Molten Steel 200 Wire Feed 36B Degasser CS1 36 Baghouse Mechanical 43 Vacuum CS2 Fabric Filter Molten Steel 200 Induction

#### Table: Vacuum Tank Degasser

# **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        | Associated<br>Emission<br>Unit<br>Number | Opacity PM                            |       | I Limit                                 |                                 | Authority for                               |  |
|-----------------|--|---------------------------------------|-------|---|---------------------------------|---|--|
| Point<br>Number |  | <b>Limit</b><br>567 IAC<br>23.3(2)"d" | lb/hr | <b>gr/dscf</b><br>567 IAC<br>23.3(2)"a" | PM <sub>10</sub> Limit<br>lb/hr | Requirement<br>(Construction<br>Permit No.) |  |
| 36A             |  | 40% (1)                               | 0.56  | 0.1                                     | 0.56                            | 06-A-790                                    |  |
| 36B             | 36                                       | 40% (2)                               | 0.18  | 0.1                                     | 0.18                            | 06-A-791                                    |  |
| 43              |  | 40% (3)                               | 0.56  | 0.1                                     | 0.56                            | 19-A-247                                    |  |

(1) 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).

(2) 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).

(3) 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).

#### **Operating Requirements with Associated Monitoring and 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

#### For EP 43 Only:

A. Emissions from the Vacuum Tank Degasser (EU 36) shall not be vented through this emission point when the steam induction system is in operation.

#### **Emission Point Characteristics**

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

| Table: Vacuum Tank Degasser<br>Stacks |                            | Stack Characteristics    |                  |                      |                     |                                       |                          |
|---------------------------------------|----------------------------|--------------------------|------------------|----------------------|---------------------|---------------------------------------|--------------------------|
| Emission<br>Point<br>Number           | Emission<br>Unit<br>Number | Construction<br>Permit # | Height<br>(feet) | Diameter<br>(inches) | Exhaust<br>Flowrate | Exhaust<br>Temp.<br>( <sup>0</sup> F) | Discharge<br>Style       |
| 36A                                   |                            | 06-A-790                 | 20               | 6                    | 130 scfm            | 109                                   | Vertical<br>Unobstructed |
| 36B                                   | 36                         | 06-A-791                 | 80               | 38                   | 10,000<br>acfm      | Variable<br>200<br>max.               | Vertical<br>Unobstructed |
| 43                                    |                            | 19-A-247                 | 80               | 20                   | 184,600<br>scfm     | Ambient                               | Vertical<br>Unobstructed |

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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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 🖂 |

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.

# Emission Point ID Numbers: 37, 38 & 41

#### Associated Equipment

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

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

Table: VTD Steam Generators

# **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-S2 (EP 37), |
|                            | 10-A-147-S1 (EP 38) and 10-A-146-S1 (EP41)    |
|                            | 567 IAC 23.3(2)"d"                            |

(1) 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 <sub>10</sub> )                           |
|-------------------------------|---|
| Emission Limit(s):            | 0.19 lb/hr                                    |
| Authority for Requirement:    | DNR Construction Permits 06-A-792-S2 (EP 37), |
|                               | 10-A-147-S1 (EP 38) and 10-A-146-S1 (EP41)    |
|                               |   |
| Pollutant: Particulate Matter | (PM)  |
| Emission Limit(s):            | 0.19 lb/hr                                    |
| Authority for Requirement:    | DNR Construction Permits 06-A-792-S2 (EP 37), |
|                               | 10-A-147-S1 (EP 38) and 10-A-146-S1 (EP41)    |

| Pollutant: Particulate Matter | (PM)  |
|-------------------------------|---|
| Emission Limit(s):            | 0.6 lb/MMBtu                                  |
| Authority for Requirement:    | DNR Construction Permits 06-A-792-S2 (EP 37), |
|                               | 10-A-147-S1 (EP 38) and 10-A-146-S1 (EP41)    |
|                               | 567 IAC 23.3(2)"b"                            |

| Pollutant: Sulfur Dioxide (S | O <sub>2</sub> )                              |
|------------------------------|---|
| Emission Limit(s):           | 500 ppmv                                      |
| Authority for Requirement:   | DNR Construction Permits 06-A-792-S2 (EP 37), |
|                              | 10-A-147-S1 (EP 38) and 10-A-146-S1 (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-S2 (EP 37), |
|                              | 10-A-147-S1 (EP 38) and 10-A-146-S1 (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)"lll"      |

#### **Operational Requirements with Associated Monitoring and Recordkeeping**

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

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. The operating requirements and associated recordkeeping for this permit shall be:

- A. No more than two of the three VTD steam generators (EU 37, EU 38 and EU 41) shall be used at any time.
- B. Each time this unit operates, the owner/operator shall record the date and time operation begins and the date and time operation ends.
- C. This unit shall combust only natural gas.
- D. As required by 40 CFR 60.48c(g)(1), the owner or operator shall record and maintain records of the amount of each fuel combusted in this unit each day.
- E. As allowed by 40 CFR 60.48c(g)(2), the owner or operator may elect to record and maintain records of the amount of each fuel combusted in this unit each month in lieu of the daily record keeping required by 40 CFR 60.48(c)(g)(1).
- F. As allowed by 40 CFR 60.48c(g)(3), the owner or operator may elect to record and maintain records of the amount of each fuel delivered to the facility each month in lieu of

the daily record keeping required by 40 CFR 60.48(c)(g)(1) if all steam generating units at the facility burn fuels meeting the criteria outlined in 40 CFR 60.48c(g)(3).

- G. This unit shall operate no more than 1000 hours per twelve (12) month period, rolled monthly.
- H. At the end of each calendar month, calculate and record the number of hours this unit operated over the previous month.
- I. At the end of each calendar month, calculate and record the number of hours this unit operated over the previous twelve (12) months.

Authority for Requirement: DNR Construction Permits 06-A-792-S2 (EP 37), 10-A-147-S1 (EP 38) and 10-A-146-S1 (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-S2 (EP 37), |
|                                      | 10-A-147-S1 (EP 38) and 10-A-146-S1 (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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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 🖂 |

# **Emission Point ID Number: 40**

Associated Equipment

Associated Emission Unit ID Number: 40

Emission Unit vented through this Emission Point: 40Emission Unit Description:Cooling TowerRaw Material/Fuel:waterRated 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: OpacityEmission Limit(s):40%Authority for Requirement:567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)Emission Limit(s):0.1 gr/dscfAuthority 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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence 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 🖂 |

# **Emission Point ID Number: 47**

#### Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 47 Emissions Control Equipment ID Number: CE-47 **Emissions Control Equipment Description: Cartridge Filters** Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: 47 Emission Unit Description: Bay 3 Burn Bed Raw Material/Fuel: Natural Gas Cutting Speed: 1,000 in/min; Natural Gas Combustion: 50 ft<sup>3</sup>/hr Rated Capacity:

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: | 567 IAC 23.3(2)"d"               |
|                            | DNR Construction Permit 23-A-124 |

(1)An exceedance of the indicator opacity of 10% 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).

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.05 gr/dscf; 0.30 lb/hr Authority for Requirement: DNR Construction Permit 23-A-124

#### **Operational Requirements with Associated Monitoring and Recordkeepng**

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

All records as required by this permit shall be available 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. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's specifications with inspections occurring at a minimum of once per year. The owner or operator shall maintain a log of all

maintenance and inspection activities performed on the equipment. This log shall include, but is not necessarily limited to:

- (1) The date and time any inspection and/or maintenance was performed on the equipment;
- (2) Any issues identified during the inspection and the date each issue was resolved;
- (3) Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR Construction Permit 23-A-124

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

| Stack Height, (ft, from the ground): | Indoor Vented                    |
|--------------------------------------|----------------------------------|
| Stack Opening, (inches, dia.):       | Indoor Vented                    |
| Exhaust Flow Rate (scfm):            | 3,500                            |
| Exhaust Temperature (°F):            | Ambient                          |
| Discharge Style:                     | Indoor Vented                    |
| Authority for Requirement:           | DNR Construction Permit 23-A-124 |

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 🖂 |

# **Emission Point ID Number: 24**

Associated Equipment

Associated Emission Unit ID Number: 24

Emission Unit vented through this Emission Point: 24Emission Unit Description:Melt Shop Emergency PumpRaw Material/Fuel:Diesel FuelRated 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: OpacityEmission Limit:40 %Authority for Requirement:567 IAC 23.3(2)"d"

Pollutant: Particulate MatterEmission Limit:0.1 gr/dscfAuthority for Requirement:567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO2)Emission Limit:2.5 lb/MMBtuAuthority 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 an area 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 2d 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 2d 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 2 of Table 2d 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 🖂 |

# **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 Permitting & Standards Branch, 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 emissionsrelated 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 onehour 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 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(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 <u>except</u> 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 ozonedepleting 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 <u>not</u> required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is <u>not</u> 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 <u>not</u> 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: Iowa Compliance Officer

Air Branch Enforcement and Compliance Assurance Division U.S. EPA Region 7 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 1101 Commercial Court, Suite 10 Manchester, IA 52057 (563) 927-2640

### Field Office 3

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

#### **Field Office 5**

Wallace State Office Building 502 E 9<sup>th</sup> St. Des Moines, IA 50319-0034 (515) 725-0268

#### Polk County Public Works Dept.

Air Quality Division 5885 NE 14th St. Des Moines, IA 50313 (515) 286-3351 Field Office 2 2300-15th St., SW Mason City, IA 50401 (641) 424-4073

#### Field Office 4

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

#### Field Office 6

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

#### Linn County Public Health

Air Quality Branch 1020 6<sup>th</sup> Street SE Cedar Rapids, IA 52401 (319) 892-6000 **Appendix A:** Site Specific Monitoring Plan for a Broken Bag Detector System EAF/LMF Baghouse

# 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: <u>https://www.epa.gov/stationary-sources-air-pollution/electric-arc-furnaces-eafs-and-argon-oxygen-decarburization-vessels</u>

**40 CFR Part 60, Subpart Dc**: Web Link to Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units: <u>https://www.ecfr.gov/cgi-bin/text-</u> <u>idx?node=sp40.7.60.d\_0c</u>

**40 CFR 63 Subpart YYYYY:** Web Link to National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities: <a href="https://www.epa.gov/stationary-sources-air-pollution/electric-arc-furnace-steelmaking-facilities-national-emission">https://www.epa.gov/stationary-sources-air-pollution/electric-arc-furnace-steelmaking-facilities-national-emission</a>

**40 CFR Part 63, Subpart ZZZZ:** Web Link to National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines: <u>https://www.ecfr.gov/cgi-bin/text-</u> <u>idx?c=ecfr;rgn=div6;view=text;node=40%3A14.0.1.1.1.1;idno=40;sid=e94dcfde4a04b27290c44</u>

<u>1dx /c=ecir;rgn=div6;view=text;node=40%3A14.0.1.1.1.1;1dno</u> 5a56e635e58;cc=ecfr