

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

**Name of Permitted Facility:** Amsted Rail Company, Inc  
**Facility Location:** 416 Carbide Lane  
Keokuk, IA 52632

**Air Quality Operating Permit Number:** 02-TV-014R3  
**Expiration Date:** September 8, 2024  
**Permit Renewal Application Deadline:** March 8, 2024

**EIQ Number:** 92-2304  
**Facility File Number:** 56-01-023

---

**Responsible Official**

Corey Jonas  
General Manager  
416 Carbide Lane  
Keokuk, Iowa 52632  
Phone #: (319) 524-2962

**Permit Contact Person for the Facility**

Mr. Paul Sheppard  
Environmental Specialist  
416 Carbide Lane  
Keokuk, IA 52632  
Phone #: (319) 524-2962 Ext. 20712

---

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

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

---

Lori Hanson, Supervisor of Air Operating Permits Section

Date

# Table of Contents

<b>I. Facility Description and Equipment List .....</b>	<b>4</b>
<b>II. Plant - Wide Conditions .....</b>	<b>6</b>
<b>III. Emission Point Specific Conditions .....</b>	<b>9</b>
<b>IV. General Conditions.....</b>	<b>73</b>
G1. Duty to Comply	
G2. Permit Expiration	
G3. Certification Requirement for Title V Related Documents	
G4. Annual Compliance Certification	
G5. Semi-Annual Monitoring Report	
G6. Annual Fee	
G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
G8. Duty to Provide Information	
G9. General Maintenance and Repair Duties	
G10. Recordkeeping Requirements for Compliance Monitoring	
G11. Evidence Used in Establishing That a Violation Has or Is Occurring	
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification	
G13. Hazardous Release	
G14. Excess Emissions and Excess Emissions Reporting Requirements	
G15. Permit Deviation Reporting Requirements	
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations	
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
G18. Duty to Modify a Title V Permit	
G19. Duty to Obtain Construction Permits	
G20. Asbestos	
G21. Open Burning	
G22. Acid Rain (Title IV) Emissions Allowances	
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
G24. Permit Reopenings	
G25. Permit Shield	
G26. Severability	
G27. Property Rights	
G28. Transferability	
G29. Disclaimer	
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	
G31. Prevention of Air Pollution Emergency Episodes	
G32. Contacts List	
<b>V. Appendix – Links to Standards .....</b>	<b>83</b>

## Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE .....	control equipment
CEM.....	continuous emission monitor
°F .....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU .....	emission unit
gr./dscf .....	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
DNR.....	Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS.....	new source performance standard
ppmv .....	parts per million by volume
lb./hr .....	pounds per hour
lb./MMBtu .....	pounds per million British thermal units
SCC.....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC .....	Standard Industrial Classification
TPY.....	tons per year
USEPA.....	United States Environmental Protection Agency

### **Pollutants**

PM.....	particulate matter
PM <sub>10</sub> .....	particulate matter ten microns or less in diameter
SO <sub>2</sub> .....	sulfur dioxide
NO <sub>x</sub> .....	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: Amsted Rail Company, Inc

Permit Number: 02-TV-014R3

Facility Description: A steel foundry that forms rail car wheels from steel scrap. (SIC 3325)

## Equipment List

Emission Point Number	Emission Unit Number(s)	Emission Unit Description	DNR Construction Permit Number
EP-1	EU-1 EU-3B EU-4	Scrap Handling Arc Furnaces (3) with Co-Jet Technology Ladle Preheat	05-A-218
EP-2	EU-2	Lime Storage Silo	03-A-962
EP-3	EU-3A	Arc Furnaces (3) with Co-Jet Technology	76-A-107-S2
EP-4	EU-6A	Enclosed Pressure Pouring/Casting Station	03-A-996
EP-5	EU-5 EU-6B EU-9 EU-10 EU-17A EU-17B EU-18 EU-21 EU-34 EU-37	Tube Preheat Pressure Casting Normalizing Furnace Tempering Furnace Riser Knockout Riser Knockout Core Baking Mold Holding Oven Mold Preheat Oven (3) Tube Curing	03-A-963-S2
EP-6	EU-8A EU-8B	Hubcutter (3) Hubcutter (3)	76-A-116-S3
EP-7	EU-13	Apex Grinder, Wheel Grinder, Final Grinding, Chamfer Grinder	88-A-160
EP-8	EU-12 EU-15	Shot Blast Wheel Cleaner (EU-12) & Wheel Peener (EU 15)	76-A-117-S2
EP-9	EU-19	Cope Cleaning	76-A-109
EP-10	EU-20A EU-20B EU-23A EU-23B	Cope Coating Baghouse Preheater Drag Spray Coating Baghouse Preheater	76-A-111-S1
EP-11	EU-22	Drag Cleaning	76-A-108
EP-13	EU-24	Sand Silo	03-A-964

### Equipment List (continued)

Emission Point Number	Emission Unit Number(s)	Emission Unit Description	DNR Construction Permit Number
EP-15	EU-25 EU-26A EU-26B EU-27 EU-28	Sand Transfer Sand Transfer Sand Heater Sand Mixer Distribution Cyclone	76-A-110-S2
EP-17	EU-29 EU-30 EU-31	Bucket Elevator 1 Bucket Elevator 2 Core Baker Bins	87-A-141-S1
EP-18	EU-32	Graphite Mold Machining	76-A-113-S1
EP-20	EU-7	Grinding	97-A-537
EP-21	EU-35	Road & Landfill	N/A
EP-37	EU37 Cooling Tower	Cooling Tower	13-A-361
EP-39	EU-39	Graphite/Clay Ingate Lathe Machine	16-A-062
EP-40	EU-38	Emergency Generator	N/A
EP-41	EU-42	Gasoline Tank #1 (300 gallon)	N/A

### Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
36	58 Natural Gas Heaters < 10 MMBtu/hr
40	Diesel Fuel Tank #1 (560 gallons)
41	Diesel Fuel Tank #2 (560 gallons)

## II. Plant-Wide Conditions

Facility Name: Amsted Rail Company, Inc.

Permit Number: 02-TV-014R3

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: September 9, 2019

Ending on: September 8, 2024

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.

---

### Emission Limits

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

Opacity (visible emissions): 40% opacity

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

Sulfur Dioxide (SO<sub>2</sub>): 500 parts per million by volume

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

#### Particulate Matter:

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

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

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

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in

Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

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

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

---

### **Plant-Wide Recordkeeping**

To show compliance with the Facility-Wide HAP emission limits of 24.4 tons/year total HAP and 9.4 tons/year individual HAP, the owner/operator of this facility shall determine and record the amount of each individual HAP and total HAP emitted on a rolling 12-month basis for each month of operation.

Authority for Requirement: 567 IAC 22.108(3)

### **NESHAP and NSPS Applicability**

Some operations at this facility are subject to the requirements of 40 CFR 63 of Subpart ZZZZZ, National Emission Standards for Iron and Steel Foundries Area Sources, and the General Provisions of 40 CFR 63, Subpart A.

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

The Natural Gas Fired Emergency Generator (EU-38) is subject to the requirements of 40 CFR 63 of Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) and 40 CFR 60 Subpart JJJJ, New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ  
40 CFR 60 Subpart JJJJ  
567 IAC 23.1(4)"cz"  
567 IAC 23.1(2)"zzz"

The Gasoline Tank #1 (EU-42) is subject to the requirements of 40 CFR 63 of Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.

Authority of Requirement: 40 CFR 63 Subpart CCCCCC  
567 IAC 23.1(4)"ec"

### III. Emission Point-Specific Conditions

Facility Name: Amsted Rail Company, Inc.  
 Permit Number: 02-TV-014R3

#### Emission Point ID Number: EP-1

##### Associated Equipment

Associated Emission Unit ID Numbers: EU-1, EU-3B, EU-4

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
EP-1	EU-1	Scrap Handling	Steel Scrap	42.4 ton/hr
	EU-3B	Electric Arc Furnaces (3) with Co-Jet Technology	Steel Scrap, Additives	38.3 ton/hr
	EU-4	Ladle Preheat	Natural Gas	0.009 mmcf/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): 20% <sup>(1)</sup>

Authority for Requirement: 40 CFR Part 63.10895(e)  
 567 IAC 23.1(4)"dz"

<sup>(1)</sup> 6- minute average, except for one 6-minute average per hour that doesn't exceed 30%. DNR Construction Permit 05-A-218 lists a 40% opacity limit, but 40 CFR 63 Subpart ZZZZZ, promulgated 1/2/2008 sets a 20% opacity limit for fugitive operations from foundry operations. Scrap handling operations conducted outside the building would not be subject to the 20% opacity limit or required opacity monitoring.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf, 24.9 lb/hr.

Authority for Requirement: 567 IAC 23.3(2)"a"  
 DNR Construction Permit 05-A-218

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limit(s): 500 ppmv  
Authority for Requirement: 567 IAC 23.3(3)"e"  
DNR Construction Permit 05-A-218

Pollutant: Single Hazardous Air Pollutants (Single HAP)  
Emission Limit(s): 9.4 TPY<sup>(2)</sup>  
Authority for Requirement: DNR Construction Permit 05-A-218

Pollutant: Total Hazardous Air Pollutants (Total HAP)  
Emission Limit(s): 24.4 TPY<sup>(2)</sup>  
Authority for Requirement: DNR Construction Permit 05-A-218

Pollutant: Total Hazardous Air Pollutants Metals (Total HAP Metals)  
Emission Limit(s): 6.21 TPY  
Authority for Requirement: DNR Construction Permit 05-A-218  
<sup>(2)</sup> Facility-wide limit.

### **Operational Limits & Requirements**

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

#### **NESHAP**

This source is subject to Subparts A (*General Provisions*; 40 CFR §63.1 – 40 CFR §63.15) and ZZZZZ (*National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources*; 40 CFR §63.10880 – 40 CFR §63.10906) of the National Emission Standards for Hazardous Air Pollutants (NESHAP). This facility (plant number 56-01-023) is considered an existing large foundry by definition.

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

#### **Operating Limits**

- A. The permittee shall operate the EAF baghouse whenever an electric arc furnace is in operation. The average capture efficiency during charging, melting, refining, and tapping operations shall be 95%. This is based on information provided by the permittee on the capture efficiency of the side draft hoods and the slag door hoods on the furnaces. It is also based on the US EPA documents, Summary of Factors Affecting Compliance by Ferrous Foundries, Volume I, January, 1981 and Electric Arc Furnaces in Ferrous Foundries – Background Information for Proposed Standards, May, 1980.
- B. The permittee shall minimize the charging of scrap that contains oil, grease or organic impurities.
- C. The furnaces shall be used to produce carbon steel. Prior to operating the furnaces to produced alloyed steel, the permittee shall notify the DNR, Air Quality Bureau.
- D. The ladle preheater shall use natural gas or propane. The maximum heat input is 0.009 mmcf/hr.

- E. The permittee shall maintain and operate the capture hoods and the capture system on the electric arc furnaces in accordance with the manufacturer's recommendations.

Authority for Requirement: DNR Construction Permit 05-A-218

Operating Condition Monitoring

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. In every two week calendar period, the permittee shall perform at least one opacity check, when the electric arc furnaces are in operation and when the weather conditions allow, for visible particulate matter emissions from the melt shop roof exhausts. The purpose of this check is to confirm that the capture hoods and capture system on the electric arc furnaces are operating properly. The visible emission checks shall be performed during periods when visible particulate matter emissions are expected to occur (e.g. during melting and oxygen lancing). The opacity of the roof exhaust shall be recorded for at least 24 minutes in accordance with US EPA Method 9. The permittee shall record the following information for each opacity check (see additional opacity monitoring in 40 CFR 63 Subpart ZZZZZ, listed later):
- i. the average opacity;
  - ii. the operation occurring during the visible emission observation;
  - iii. whether the visible emissions are representative of normal operations;
  - iv. if the emissions are not representative of normal operation, the cause of the abnormal emissions; and
  - v. any corrective action taken to minimize the visible emissions.
- B. The permittee shall record the monthly emissions of single HAP metals and total HAP metals that are not captured by the EAF baghouse. The basis of the record shall be the most recent testing done for HAP metals under section 12 of DNR Construction Permit 05-A-218 on the dust collected in the baghouse, the allowable emission rate of particulate matter from the melt shop roof exhausts, and the actual monthly operation of the electric arc furnaces.
- i. The following equation shall be used to determine the emissions of individual HAP metals from the melt shop roof exhausts:  
$$\text{HAP}_i = (\text{percentage of individual HAP in the baghouse dust}) \times 1/100 \times 24.9 \text{ lbs/hr} \times \text{OH}$$

Where,

HAP<sub>i</sub> = individual HAP metal emission rate (lbs/month)

24.9 lbs/hr = allowable PM emissions rate through melt shop roof exhausts

OH = number of hours that the electric arc furnaces were in operation
  - ii. The monthly emission rate of total HAP metals shall be determined by summing the emission rates of the individual HAP metals.

- C. The permittee shall record monthly the rolling 12-month total of total HAP metal emissions, based on the equations listed in condition B above.
- D. The permittee shall submit an annual report to the DNR, Air Quality Bureau. The report shall include an estimate of HAP metal emissions (single and total) in tons per year from the EAF baghouse and the melt shop roof exhausts. This report is due by March 15 and shall cover the previous calendar year.
- E. The permittee shall submit reports that identify all exceedances of the rolling 12-month emissions limitations for HAPs from Emission Limits section above. The report shall be submitted no later than 30 days from the end of the month in which the exceedance occurred.
- F. The permittee shall maintain maintenance records on any work that is done on the capture hoods that serve the electric arc furnaces.

Authority for Requirement: DNR Construction Permit 05-A-218

**Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 71

Stack Diameter (inches, dia.): See Note A. below

Exhaust Flow Rate (scfm): See Note A. below

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Obstructed

Authority for Requirement: DNR Construction Permit 05-A-218

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.

- A. The meltshop exhausts through the following:
  - i. Four small powered ventilators, each with a stack diameter of 10.7 feet and each rated at 39,600 acfm.
  - ii. Nine large powered ventilators, each with a stack diameter of 14.4 feet and each rated at 67,000 acfm.
  - iii. One roof monitor, stack dimensions of 27.9 feet by 426.5 feet and rated at 63,500 acfm.

**Monitoring Requirements**

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

**Opacity Monitoring:**

- A. The permittee must conduct opacity tests for fugitive emissions according to the requirements in 40 CFR 63.6(h)(5) and Table 1 of 40 CFR 63 Subpart ZZZZZ.
- B. Subsequent performance tests must be conducted to demonstrate compliance with the opacity limit in 40 CFR 63.10895(e) no less frequently than every 6 months and each time a process change likely to increase fugitive emissions is made.

Authority for Requirement: 40 CFR 63.10898(h) and (i)  
567 IAC 23.1(4)"dz"

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-2**

### Associated Equipment

Associated Emission Unit ID Number: EU-2  
Emissions Control Equipment ID Number: CE-2  
Emissions Control Equipment Description: Bin Vent Filter

---

Emission Unit vented through this Emission Point: EP-2  
Emission Unit Description: Lime Storage Silo  
Raw Material/Fuel: pebble lime  
Rated Capacity: 20 tons per hour

### **Applicable Requirements**

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

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

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

Pollutant: PM-10  
Emission Limit(s): 0.1 lb./hr  
Authority for Requirement: DNR Construction Permit 03-A-962

Pollutant: Particulate Matter (PM)  
Emission Limit: 30.5 lb/hr <sup>(1)</sup>  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 03-A-962

<sup>(1)</sup> Unit was installed in 1976; PM limit is based on the Process Weight Rate Table at a maximum fill rate of 20 tons per hour.

#### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 53.5  
Stack Diameter (inches, dia.): 6  
Exhaust Flow Rate (scfm): 3.6 (displacement flow)  
Exhaust Temperature (°F): 70  
Discharge Style: Vertical, Unobstructed  
Authority for Requirement: DNR Construction Permit 03-A-962

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may

vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-3**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-3A  
Emissions Control Equipment ID Number: CE-1  
Emissions Control Equipment Description: Wheelabrator Fabric Filter Baghouse

---

Emission Unit vented through this Emission Point: EU-3A  
Emission Unit Description: Electric Arc Furnaces (3) with Co-Jet Technology  
Raw Material/Fuel: steel scrap, additives  
Rated Capacity: 38.3 tons per hour

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

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

DNR Construction Permit 76-A-107-S2

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.8 lb/ton metal charged or 0.06 lb total metal HAP/ton metal charged

Authority for Requirement: 40 CFR 63.10895(c)(1)

567 IAC 23.1(4)"dz"

Pollutant: Particulate Matter (PM)

Emission Limit: 16.1 lb/hr; 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 76-A-107-S2

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

Emission Limit: 500 ppmv

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

DNR Construction Permit 76-A-107-S2

Pollutant: Single Hazardous Air Pollutants (Single HAP)

Emission Limit(s): 9.4 TPY<sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 76-A-107-S2

Pollutant: Total Hazardous Air Pollutants (Total HAP)  
Emission Limit(s): 24.4 TPY<sup>(2)</sup>  
Authority for Requirement: DNR Construction Permit 76-A-107-S2

Pollutant: Total Hazardous Air Pollutants Metals (Total HAP Metals)  
Emission Limit(s): 3.1 TPY  
Authority for Requirement: DNR Construction Permit 76-A-107-S2  
<sup>(2)</sup>Facility-wide limit.

### **Operational Limits & Requirements**

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

#### **NESHAP**

This source is subject to Subparts A (*General Provisions*; 40 CFR §63.1 – 40 CFR §63.15) and ZZZZZ (*National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources*; 40 CFR §63.10880 – 40 CFR §63.10906) of the National Emission Standards for Hazardous Air Pollutants (NESHAP). This facility (plant number 56-01-023) is considered an existing large foundry by definition.

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

#### **Operating Limits**

- A. The permittee shall operate the EAF baghouse whenever an electric arc furnace is in operation. The average capture efficiency during charging, melting, refining, and tapping operations shall be 95%. This is based on information provided by the permittee on the capture efficiency of the side draft hoods and the slag door hoods on the furnaces. It is also based on the US EPA documents, Summary of Factors Affecting Compliance by Ferrous Foundries, Volume I, January, 1981 and Electric Arc Furnaces in Ferrous Foundries – Background Information for Proposed Standards, May, 1980.
- B. The permittee shall minimize the charging of scrap that contains oil, grease or organic impurities.
- C. The furnaces shall be used to produce carbon steel. Prior to operating the furnaces to produce alloyed steel, the permittee shall notify the DNR, Air Quality Bureau.
- D. The permittee shall maintain and operate the capture hoods and the capture system on the electric arc furnaces in accordance with the manufacturer's recommendations.

Authority for Requirement: DNR Construction Permit 76-A-107-S2

#### **Operating Conditions Monitoring**

- A. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall record the pressure drop across the baghouse at least once per day.

- B. The permittee shall record the monthly emissions of single HAP metals and total HAP metals from the EAF baghouse. The basis of the record shall be the most recent testing done for HAP metals and PM under section 12 of DNR Construction Permit 76-A-107-S2 and the actual monthly operation of the electric arc furnaces.
- i. The following equation shall be used to determine the emissions of individual HAP metals from the EAF baghouse:
- $$\text{HAP}_i = (\text{percentage of individual HAP of PM emissions}) \times 1/100 \times \text{PM} \times \text{OH}$$
- Where,
- HAP<sub>i</sub> = individual HAP metal emission rate (lbs/month)
- PM lbs/hr = actual PM emission rate based on most recent stack test done under section 12 of permit 76-A-107-S2.
- OH = number of hours that the electric arc furnaces were in operation
- ii. The monthly emission rate of total HAP metals shall be determined by summing the emission rates of the individual HAP metals.
- C. The permittee shall record monthly the rolling 12-month total of total HAP metal emissions, based on the equations listed in Condition B above.
- D. The permittee shall submit an annual report to the DNR, Air Quality Bureau. The report shall include an estimate of HAP metal emissions (single and total) in tons per year from the EAF baghouse and the melt shop roof exhausts. This report is due by March 15 and shall cover the previous calendar year.
- E. The permittee shall submit reports that identify all exceedances of the rolling 12-month emissions limitations for HAPs from Emission Limits Section. The report shall be submitted no later than 30 days from the end of the month in which the exceedance occurred.

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.

Authority for Requirement: DNR Construction Permit 76-A-107-S2

**Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 11

Stack Opening (inches, dia.): 84 inches x 42 inches <sup>(1)</sup>

Exhaust Flow Rate (scfm): 187,700

Exhaust Temperature (°F): 150

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 76-A-107-S2

<sup>(1)</sup> There are four exhaust fans on this unit with identical 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 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.*

**Stack Testing**

<b>Pollutant</b>	<b>Testing Required</b>	<b>Test Run Time</b>	<b>Test Method</b>
PM (state)	Yes	2 hour	40 CFR 60, Appendix A, Method 5 and 40 CFR 51 Appendix M, Method 202
Opacity	Yes	1 hour	40 CFR 60, Appendix A, Method 9
HAP metals	Yes*	2 hour	40 CFR 60, Appendix A, method 29

\* The permittee shall submit a report to the DNR - Air Quality Bureau if the results of the metals testing is significantly different than what was reported in the construction permit application for Project Number 04-433.

The stack tests listed above are required on the baghouse every 2.5 years unless the results of the testing show that the emissions are less than 70% of the allowable emission rates.<sup>(1)</sup> If the results of the testing show that emissions are less than 70% of the allowable emission rates, the permittee may perform the required tests once every five years. At the same time that the baghouse’s exhaust stack is tested, the permittee shall perform an analysis on the baghouse dust for the concentration of HAP metals. The unit(s) being sampled should be operated 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 this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that this unit(s) 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 this unit(s) is in compliance.

Each emissions compliance test must be approved by the DNR. Unless otherwise specified by the DNR, each test shall consist of three separate runs. The arithmetic mean of three acceptable test runs shall apply for compliance, unless otherwise indicated by the DNR. The test methods and run times to be used are those stated above unless otherwise approved by the DNR.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the DNR shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance

of test ports. The DNR shall reserve the right to impose additional, different, or more detailed testing requirements.

*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)*

Authority for Requirement: DNR Construction Permit 76-A-107-S2

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

**CAM Plan for EP-3, EU-3A Baghouse**

*This emission point shall conform to the conditions listed below*

Emissions Unit

Emission Unit: Electric Arc Furnaces (3) (EU-3A)  
Facility: Amsted Rail Company, Inc.-Keokuk, Iowa Plant  
Pollutant: PM, Opacity  
Emission Control Technique: Baghouse  
Control Device Identification Number: CE-1  
Emission Egress Point Identification Number: EP-3

Applicable Requirements

Particulate Matter (PM) Limit: 16.1 lbs/hr., 0.01 gr/dscf  
Authority for Requirement: DNR Construction Permit 76-A-107-S2

Opacity Emission Limit: 40%  
Authority for Requirement: 567 IAC 23.3(2)"d"  
DNR Construction Permit 76-A-107-S2

Monitoring Approach

Applicable Requirements	PM Limits	Opacity
General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	Baghouse pressure drop readings are performed daily.	Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material handling operations of this unit.
Monitoring Methods and Locations (continued)	The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.  Bags are inspected for leaks or wear on a quarterly basis.  All baghouse components are inspected every 6 months to insure proper operation.	The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.  Bags are inspected for leaks or wear on a quarterly basis.  All baghouse components are inspected every 6 months to insure proper operation.
Indicator Range/Source	Pressure drop: 5 to 11 in. H <sub>2</sub> O.  Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.	Presence of visible emissions.  Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.
Data Collection Frequency	Daily: Pressure drop observations.  Monthly, Quarterly and semiannually: Equipment inspections.	Weekly: Visible emissions observations.  Monthly, Quarterly and semiannually: Equipment inspections.
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.
QA/QC	N/A—None	Visible emissions observer trainer per Method 22.

### Justification and Rationale

A frequent inspection of the baghouse and its components will insure that it continues to operate properly and achieve the desired particulate emission control efficiency. The absence of visible emissions is a good indicator of low emissions and proper air pollution control (APC) device operation.

### Additional Comments

Although Method 22 applies to fugitive sources, the visible/no visible emissions observation techniques of Method 22 can be applied to ducted emissions. For situations where no visible emissions are the norm, a technique focused toward identifying a change in performance as indicated by visible emissions is a useful and effective technique. The use of the visible/no visible emissions technique reduces the need for an on-site Method 9 observer.

For large pollutant specific emissions units (post control potential to emit equal to or greater than 100 percent of the amount required for a source to be classified as a major source), CAM requires the owner or operator to collect four or more data values over each hour. Since this emissions unit is not classified as a "large" source (post control potential to emit is less than 100 TPY), this monitoring approach is not required.

### Reference/Information Source

Method 22—Visual determination of fugitive emissions from material sources and smoke emissions from flares.

Authority for Requirement: 567 IAC 22.108(3)

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

### Associated Equipment

Associated Emission Unit ID Number: EU-6A

---

Emission Unit vented through this Emission Point: EU-6A  
Emission Unit Description: Enclosed Pressure Pouring/Casting  
Raw Material/Fuel: molten steel  
Rated Capacity: 42 tons/hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

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

DNR Construction Permit 03-A-996

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

Pollutant: PM-10

Emission Limit: 0.14 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-996

Pollutant: Particulate Matter (PM)

Emission Limit: 43 lb/hr <sup>(2)</sup>

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

DNR Construction Permit 03-A-996

<sup>(2)</sup> Unit was installed in 1976; PM limit is based on the Process Weight Rate Table at a maximum pour rate of 42 tons per hour.

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

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

#### Operating Limits

The enclosed pressure pouring system shall be operated at all times when pouring metal into molds.

Authority for Requirement: DNR Construction Permit 03-A-996

**Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 59  
Stack Opening (inches, dia.): 4  
Exhaust Flow Rate (scfm): 167  
Exhaust Temperature (°F): 200  
Discharge Style: Vertical, Unobstructed  
Authority for Requirement: DNR Construction Permit 03-A-996

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-5**

Associated Equipment

Associated Emission Unit ID Numbers: EU-5, EU-9, EU-10, EU-17A, EU-17B, EU-18, EU-21, EU-34 & EU-37

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>
EP-5	EU-5	Tube Preheat (3)	Natural Gas/Propane	1.0 MMBTU/hr per unit
	EU-6B	Pressure Casting	Molten Steel	42 ton/hr
	EU-9	Normalizing Furnace	Natural Gas/Propane	39.4 MMBTU/hr
	EU-10	Tempering Furnace	Natural Gas/Propane	4.0 MMBTU/hr
	EU-17A	Riser Knockout	Coated Sand	1.75 ton/hr
	EU-17B	Riser Knockout	Rice Hulls	0.05 ton/hr
	EU-18	Core Baking Station	Coated Sand	1.75 ton/hr
	EU-21	Mold Holding Oven	Natural Gas/Propane	5.0 MMBTU/hr
	EU-34	Mold Preheat Oven (3)	Natural Gas/Propane	4.5 MMBTU/hr/unit
EU-37	Tube Curing	Natural Gas/Propane	2.9 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): 20% <sup>(1)</sup>

Authority for Requirement: 40 CFR 63.10895(e)  
567 IAC 23.1(4)"dz"

DNR Construction Permit 03-A-963-S2

<sup>(1)</sup> Fugitive emissions from the foundry operations shall not exceed an opacity greater than 20% (6 minute average), except for one 6-minute average that does not exceed 30% (40 CFR 63.10895(e).

Pollutant: PM-10

Emission Limit(s): 0.75 lbs./hr

Authority for Requirement: DNR Construction Permit 03-A-963-S2

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

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

DNR Construction Permit 03-A-963-S2

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limit: 500 ppmv  
Authority for Requirement: 567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

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

#### **NESHAP**

This source is subject to Subparts A (*General Provisions*; 40 CFR §63.1 – 40 CFR §63.15) and ZZZZZ (*National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources*; 40 CFR §63.10880 – 40 CFR §63.10906) of the National Emission Standards for Hazardous Air Pollutants (NESHAP). This facility (plant number 56-01-023) is considered an existing large foundry by definition.

The only requirements of 40 CFR Part 63 Subpart ZZZZZ applicable to this source is the 20% opacity limit of §63.10895(e) and monitoring requirements of §63.10898(h) and (i).

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

#### **Operating Limits**

- A. The furnaces and ovens covered by this construction permit shall be fired by natural gas or LPG only.
- B. The owner or operator shall follow the applicable requirements of Subpart ZZZZZ, 40 CFR 63.10880 through 63.10906.

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept 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. The owner or operator shall follow the applicable monitoring, recordkeeping and reporting requirements of Subpart ZZZZZ, 40 CFR 63.10880 through 63.10906.

Authority for Requirement: DNR Construction Permit 03-A-963-S2

### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 64

Stack Opening (inches, dia.): See Note below <sup>(1)</sup>

Exhaust Flow Rate (scfm): See Note below <sup>(1)</sup>

Exhaust Temperature (°F): See Note below <sup>(1)</sup>

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-963-S2

<sup>(1)</sup> Emissions exhaust through 15 roof monitors above the molding area. Each monitor is approximately 28 feet by 28 feet.

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.

The following equipment may be connected to this emissions point:

<b>Equipment</b>	<b>Maximum Capacity</b>
Tube Preheat – 3 units (EU-5 )	1.0 MMBTU/hr per unit, natural gas/LPG
Pressure Pouring/Casting Station (EU-6B)	42 tons metal per hour
Rotary Hearth Normalizing Furnace (EU-9)	39.4 MMBTU/hr, natural gas/LPG
Tempering Furnace (EU-10)	4.0 MMBTU/hr, natural gas/LPG
Core Baking Station (EU-18)	1.75 tph, coated sand
Mold Holding Oven (EU-21)	5.0 MMBTU/hr, natural gas/LPG
3 Mold Preheat Ovens (EU-34)	4.5 MMBTU/hr per unit, natural gas/LPG
Riser Knockout (EU-17A)	1.75 tons per hour
Riser Knockout (EU-17B)	0.05 ton per hour
Tube Curing (EU-37)	2.9 MMBtu/hr, natural gas/LPG

**Monitoring Requirements**

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

**Opacity Monitoring:**

- A. The permittee must conduct opacity tests for fugitive emissions according to the requirements in 40 CFR 63.6(h)(5) and Table 1 of 40 CFR 63 Subpart ZZZZZ.
- B. Subsequent performance tests must be conducted to demonstrate compliance with the opacity limit in 40 CFR 63.10895(e) no less frequently than every 6 months and each time a process change likely to increase fugitive emissions is made.

Authority for Requirement: 40 CFR 63.10898(h) and (i)  
567 IAC 23.1(4)"dz"

**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: EP-6**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-8A & EU-8B

Emissions Control Equipment ID Number: CE-3 & CE-4

Emissions Control Equipment Description: Spark Arrestor (CE-3) &  
Fabric Filter Baghouse (CE-4)

---

Emission Unit vented through this Emission Point: EU-8A & EU-8B

Emission Unit Description: Hubcutters (3)

Raw Material/Fuel: propane & steel wheels (respectively)

Rated Capacity: 4.2 gallons per hour & 60-wheels per hour (respectively)

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

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

DNR Construction Permit 76-A-116-S3

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

Pollutant: PM-10

Emission Limit: 1.46 lb/hr

Authority for Requirement: DNR Construction Permit 76-A-116-S3

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

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

DNR Construction Permit 76-A-116-S3

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

Emission Limit: 500 ppmv

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

DNR Construction Permit 76-A-116-S3

**Operational Limits & Requirements**

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

**Operating Limits**

Oxygen and propane shall be used as the fuel for the cutting torches.

Authority for Requirement: DNR Construction Permit 76-A-116-S3

**Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 39

Stack Diameter (inches, dia.): 36

Exhaust Flow Rate (scfm): 11,685

Exhaust Temperature (°F): 175

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 76-A-116-S3

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

**CAM Plan for EP-6, EU-8B Baghouse**

*This emission point shall conform to the conditions listed below*

**Emissions Unit**

Emission Unit: Hubcutters (EU-8B)

Facility: Amsted Rail Company, Inc. – Keokuk Plant

Pollutant: PM, PM<sub>10</sub>

Emission Control Technique: Baghouse

Control Device Identification Number: CE-4

Emission Egress Point Identification Number: EP-6

Applicable Requirements

Particulate Matter (PM) Limit: 0.10 gr/dscf  
 Authority for Requirement: 567 IAC 23.3(2)"a"  
 DNR Construction Permit 76-A-116-S3

Particulate Matter (PM<sub>10</sub>) Limit: 1.46 lb/hr  
 Authority for Requirement: DNR Construction Permit 76-A-116-S3

Monitoring Approach

General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	<p>Baghouse pressure drop readings are performed daily.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>	<p>Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material handling operations of this unit.</p> <p>If visible emissions are present and corrective action does not return the observation to no visible emissions, a Method 9 observation will be performed.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>
Indicator Range/Source	<p>Pressure drop: 2 to 9 in. H<sub>2</sub>O.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>	<p>Presence of visible emissions.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>

Data Collection Frequency	Daily: Pressure drop observations.  Monthly, Quarterly and semiannually: Equipment inspections.	Weekly: Visible emissions observations.  Monthly, Quarterly and semiannually: Equipment inspections.
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.
QA/QC	N/A—None	Visible emissions observer trained per Method 22. Opacity observer trained and certified per Method 9.

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-7**

Associated Equipment

Associated Emission Unit ID Number: EU-13  
Emissions Control Equipment ID Number: CE-5  
Emissions Control Equipment Description: Pulse-Jet Baghouse

---

Emission Unit vented through this Emission Point: EU-13  
Emission Unit Description: Apex Grinder, Wheel Grinder, Final Grinding, Chamfer Grinder  
Raw Material/Fuel: Steel wheels  
Rated Capacity: 93.3 tons/hr

**Applicable Requirements**

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

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

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

Pollutant: Particulate Matter (PM)  
Emission Limit: 0.05 gr/dscf  
Authority for Requirement: 567 IAC 23.4(6)  
IDNR Construction Permit 88-A-160

**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

**CAM Plan for EP-7, EU-13 Baghouse**

*This emission point shall conform to the conditions listed below*

Emissions Unit

Process/Emission Unit: Grinding (Apex and Chamfer) (EU-13)

Facility: Amsted Rail Company, Inc. – Keokuk Plant

Pollutant: PM

Emission Control Technique: Baghouse

Control Device Identification Number: CE-5

Emission Egress Point Identification Number: EP-7

Applicable Requirements

Particulate Matter (PM) Limit: 0.05 gr/dscf

Authority for Requirement: 567 IAC 23.4(6)

DNR Construction Permit 88-A-160

Monitoring Approach

General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	<p>Baghouse pressure drop readings are performed daily.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>	<p>Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material handling operations of this unit.</p> <p>If visible emissions are present and corrective action does not return the observation to no visible emissions, a Method 9 observation will be performed.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p>

		All baghouse components are inspected every 6 months to insure proper operation.
Indicator Range/Source	Pressure drop: 2 to 8 in. H <sub>2</sub> O.  Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.	Presence of visible emissions.  Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.
Data Collection Frequency	Daily: Pressure drop observations.  Monthly, Quarterly and semiannually: Equipment inspections.	Weekly: Visible emissions observations.  Monthly, Quarterly and semiannually: Equipment inspections.
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.
QA/QC	N/A—None	Visible emissions observer trained per Method 22. Opacity observer trained and certified per Method 9.

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-8**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-12 & EU-15

Emissions Control Equipment ID Number: CE-6

Emissions Control Equipment Description: Baghouse

---

Emission Unit vented through this Emission Point: EU-12 & EU-15

Emission Unit Description: Wheel Cleaner & Wheel Peener (respectively)

Raw Material/Fuel: Abrasive shot

Rated Capacity: 90,000 lb/hr & 59,940 lb/hr (respectively)

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

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

DNR Construction Permits 76-A-117-S2

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

Pollutant: PM-10

Emission Limit: 0.77 lbs/hr

Authority for Requirement: DNR Construction Permit 76-A-117-S2

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

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

DNR Construction Permit 76-A-117-S2

Pollutant: Single HAP

Emission Limit: 9.4 tons/yr<sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 76-A-117-S2

Pollutant: Total HAP

Emission Limit: 24.4 tons/yr<sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 76-A-117-S2

<sup>(2)</sup> Facility-wide limit.

**Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 20  
Stack Diameter (inches, dia.): 30  
Exhaust Flow Rate (scfm): 9000  
Exhaust Temperature (°F): 70  
Discharge Style: Vertical, Unobstructed  
Authority for Requirement: DNR Construction Permit 76-A-117-S2

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

**CAM Plan for EP-8, EU-12, EU-15 Baghouse**

*This emission point shall conform to the conditions listed below.*

Emissions Unit

Process/Emission Unit: Wheel Cleaner (EU-12) and Wheel Peener (EU-15)  
Facility: Amsted Rail Company, Inc. – Keokuk Plant  
Pollutant: PM, PM<sub>10</sub>  
Emission Control Technique: Baghouse  
Control Device Identification Number: CE-6  
Emission Egress Point Identification Number: EP-8

Applicable Requirements

Particulate Matter (PM) Limit: 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 76-A-117-S2

Particulate Matter (PM<sub>10</sub>) Limit: 0.77 lbs/hr.  
Authority for Requirement: DNR Construction Permit 76-A-117-S2

Monitoring Approach

General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	<p>Baghouse pressure drop readings are performed daily.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>	<p>Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material handling operations of this unit.</p> <p>If visible emissions are present and corrective action does not return the observation to no visible emissions, a method 9 observation will be performed.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>
Indicator Range/Source	<p>Pressure drop: 2 to 9 in. H<sub>2</sub>O.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>	<p>Presence of visible emissions.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>
Data Collection Frequency	<p>Daily: Pressure drop observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>	<p>Weekly: Visible emissions observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or	Records of visible emission observations, equipment inspections, and any actions resulting from observations or

	inspections are maintained on-site.	inspections are maintained on-site.
QA/QC	N/A—None	Visible emissions observer trained per Method 22. Opacity observer trained and certified per Method 9.

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-9**

Associated Equipment

Associated Emission Unit ID Numbers: EU-19  
Emissions Control Equipment ID Number: CE-7 & CE-8  
Emissions Control Equipment Description: Cyclone & Baghouse (respectively)

---

Emission Unit vented through this Emission Point: EU-19  
Emission Unit Description: Cope Cleaner  
Raw Material/Fuel: Abrasive sand  
Rated Capacity: 300 lb/hr

**Applicable Requirements**

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

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

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

Pollutant: Particulate Matter (PM)  
Emission Limit: 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 76-A-109

**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 this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-10**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-20A, EU-23A, EU-20B & EU-23B

Emissions Control Equipment ID Number: CE-21

Emissions Control Equipment Description: Fabric Filter Baghouse

---

Emission Unit vented through this Emission Point: EU-20A, EU-23A, EU-20B & EU-23B

Emission Unit Description: Cope & Drag Coating Booths, Baghouse Preheaters

Raw Material/Fuel: Fused silica flour, veegum, gum powder, natural gas

Rated Capacity: 45.5 lb/hr per booth, 0.001 MMcf/hr per heater

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

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

DNR Construction Permit 76-A-111-S1

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

Pollutant: PM-10

Emission Limit: 1.62 lb/hr

Authority for Requirement: DNR Construction Permit 76-A-111-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.01 gr/dscf

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

DNR Construction Permit 76-A-111-S1

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

Emission Limit: 500 ppmv

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

DNR Construction Permit 76-A-111-S1

**Operational Limits & Requirements**

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

**Operating Limits**

The baghouse shall be maintained according to the manufactures specifications.

**Operating Condition Monitoring**

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.

The owner/operator shall maintain a record of all maintenance and repairs done to the baghouse.

Authority for Requirement: DNR Construction Permit 76-A-111-S1

**Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 61

Stack Diameter (inches, dia.): 32

Exhaust Flow Rate (scfm): 18,928

Exhaust Temperature (°F): 100

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 76-A-111-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 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 following monitoring requirements.*

**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 this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-11**

Associated Equipment

Associated Emission Unit ID Numbers: EU-22  
Emissions Control Equipment ID Number: CE-10 & CE-11  
Emissions Control Equipment Description: Cyclone & Baghouse (respectively)

---

Emission Unit vented through this Emission Point: EU-22  
Emission Unit Description: Drag Cleaner  
Raw Material/Fuel: Abrasive sand  
Rated Capacity: 300 lb/hr

**Applicable Requirements**

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

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

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

Pollutant: Particulate Matter (PM)  
Emission Limit: 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 76-A-108

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic 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 this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

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

### Associated Equipment

Associated Emission Unit ID Numbers: EU-24

---

Emission Unit vented through this Emission Point: EU-24  
Emission Unit Description: Sand Silo  
Raw Material/Fuel: Sand  
Rated Capacity: 12 tons/hr

### **Applicable Requirements**

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

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

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

Pollutant: PM-10  
Emission Limit: 0.03 lb/hr  
Authority for Requirement: DNR Construction Permit 03-A-964

Pollutant: Particulate Matter (PM)  
Emission Limit: 21.7 lb/hr<sup>(1)</sup>  
Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 03-A-964

<sup>(1)</sup> Unit was installed in 1976; PM limit is based on the Process Weight Rate Table at a maximum fill rate of 12 tons per hour.

#### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 70  
Stack Diameter (inches): 14 x 14  
Exhaust Flow Rate (scfm): 2.4 scfm (displacement flow)  
Exhaust Temperature (°F): 70  
Discharge Style: Vertical, Unobstructed  
Authority for Requirement: DNR Construction Permit 03-A-964

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall

submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-15**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-25, EU-26A, EU-26B, EU-27 & EU-28

Emissions Control Equipment ID Number: CE-14 & CE15

Emissions Control Equipment Description: Cyclone & Baghouse (respectively)

---

Emission Unit vented through this Emission Point: EU-25

Emission Unit Description: Sand Transfer

Raw Material/Fuel: Sand

Rated Capacity: 8.1 tons/hr

Emission Unit vented through this Emission Point: EU-26A

Emission Unit Description: Sand Transfer

Raw Material/Fuel: Sand

Rated Capacity: 8.1 tons/hr

Emission Unit vented through this Emission Point: EU-26B

Emission Unit Description: Sand Heater

Raw Material/Fuel: Natural gas (propane back-up)

Rated Capacity: 0.0023 mmcf/hr (25 gal/hr propane)

Emission Unit vented through this Emission Point: EU-27

Emission Unit Description: Sand Mixer

Raw Material/Fuel: Sand

Rated Capacity: 8.34 tons/hr

Emission Unit vented through this Emission Point: EU-28

Emission Unit Description: Distribution Cyclone

Raw Material/Fuel: Sand

Rated Capacity: 8.34 tons/hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

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

DNR Construction Permit 76-A-110-S2

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

proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM<sub>10</sub>

Emission Limit: 0.80 lb/hr

Authority for Requirement: DNR Construction Permit 76-A-110-S2

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"  
DNR Construction Permit 76-A-110-S2

Pollutant: Particulate Matter (PM)

Emission Limit: 0.80 lb/hr

Authority for Requirement: DNR Construction Permit 76-A-110-S2

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

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"  
DNR Construction Permit 76-A-110-S2

Pollutant: Phenol

Emission Limit: 1.76 lb/hr

Authority for Requirement: DNR Construction Permit 76-A-110-S2

### **Operational Limits & Requirements**

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

#### **NESHAP**

This source is subject to Subparts A (*General Provisions*; 40 CFR §63.1 – 40 CFR §63.15) and ZZZZZ (*National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources*; 40 CFR §63.10880 – 40 CFR §63.10906) of the National Emission Standards for Hazardous Air Pollutants (NESHAP). This facility (plant number 56-01-023) is considered an existing large foundry by definition.

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

#### **Operating Limits**

- A. Phenol emissions from the sand mixer (EU 27) shall not exceed 7.71 tons in any rolling 12 month period.
- B. This permit is based on information provided by the permittee that phenol based resins will be used in the sand mixer. Prior to using resins that contain other HAPs, the permittee shall notify the DNR, Air Quality Bureau in writing.

Authority for Requirement: 567 IAC 22.108(3) (EU-27)

- A. Per 40 CFR §63.10895, the owner or operator shall comply with the pollution prevention management practices in 40 CFR §63.10885 and 40 CFR §63.10886.
- B. The facility (plant number 53-01-023) shall:
  - Do all operation and maintenance required by NESHAP Subpart ZZZZZ per 40 CFR §63.10896 not specified above and
  - Do all monitoring required by NESHAP Subpart ZZZZZ per 40 CFR §63.10897 not specified above.

Authority for Requirement: DNR Construction Permit 76-A-110-S2 (EP-15)

Reporting & Recordkeeping

- A. The permittee shall maintain the following daily records:
  - i. The identification and the phenol content of any resin used in the emissions unit;
  - ii. The amount of resin used (pounds); and
  - iii. The amount of coated sand produced.
- B. The permittee shall maintain the following monthly records:
  - i. The amount of coated sand produced;
  - ii. The emission rate of phenol from this emissions unit (tons); and
  - iii. The rolling, 12-month total of the emission rate of phenol from this emissions unit (tons).
- C. The monthly emissions of phenol shall be calculated by using the following equation:
 
$$E_{ph} = \sum_i (0.5 \times P_i / 100 \times R_i \times 1/2000)$$
 Where,
  - $E_{ph}$  = tons of phenol emitted
  - $P_i$  = percent (%) of phenol in resin i
  - $R_i$  = amount of resin type i used during the month (pounds)
  - 0.5 = phenol evaporation rate at the sand mixer, provided by resin supplier, HA International
- D. The permittee shall submit reports that identify all exceedances of the rolling 12-month emissions limitations for HAPs. The report shall be submitted no later than 30 days from the end of the month in which the exceedance occurred.
- E. If the rolling 12-month total of an individual HAP (i.e. phenol) emissions exceeds 6.0 tons per year, the permittee shall maintain the following daily records:
  - i. The identification, the phenol content and the amount of each resin used in the sand mixer.
  - ii. The daily emission rate of phenol emissions from the sand mixer.
  - iii. Beginning with the first day after the emission rate of phenol exceeds 6.0 tons per year, the rolling, 365-day total of phenol emissions.

The permittee may return to the monthly recordkeeping when the rolling 365-day total of phenol emissions is less than 6.0 tons. The monthly recordkeeping requirement will go back into effect beginning on the first day of the calendar month that follows the day on which phenol emissions are less than the 6.0 tpy threshold.

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.

Authority for Requirement: 567 IAC 22.108(3) (EU-27)

F. Per 40 CFR §63.10896, the owner or operator shall maintain a copy of the O&M plan at the facility (plant number 56-01-023) and make it available for review upon request.

G. The owner or operator shall keep all records as required by NESHAP Subpart ZZZZZ per 40 CFR §63.10899.

Authority for Requirement: DNR Construction Permit 76-A-110-S2 (EP-15)

### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 22

Stack Opening (inches, dia.): 14 X 21

Exhaust Flow Rate (scfm): 6,500

Exhaust Temperature (°F): 120

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 76-A-110-S2

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

Applicable to CE15 (baghouse)

**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 this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-17**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-29, EU-30 & EU-31

Emissions Control Equipment ID Number: CE-22

Emissions Control Equipment Description: Cartridge Filters

---

Emission Unit vented through this Emission Point: EU-29 & EU-30

Emission Unit Description: Bucket Elevator #1 & Bucket Elevator #2

Raw Material/Fuel: Sand

Rated Capacity: 8.34 tons/hr & 2.63 tons/hr (respectively)

Emission Unit vented through this Emission Point: EU-31

Emission Unit Description: Core Baker Bins

Raw Material/Fuel: Sand

Rated Capacity: 4.38 tons/hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

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

DNR Construction Permit 87-A-141-S1

<sup>(1)</sup> 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: PM-2.5

Emission Limit: 2.10 lb/hr

Authority for Requirement: DNR Construction Permit 87-A-141-S1

Pollutant: PM-10

Emission Limit: 3.20 lb/hr

Authority for Requirement: DNR Construction Permit 87-A-141-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.05 gr/dscf

Authority for Requirement: 567 IAC 23.4(6)

DNR Construction Permit 87-A-141-S1

### **Operational Limits & Requirements**

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

#### **NESHAP**

This source is subject to Subparts A (*General Provisions*; 40 CFR §63.1 – 40 CFR §63.15) and ZZZZZ (*National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources*; 40 CFR §63.10880 – 40 CFR §63.10906) of the National Emission Standards for Hazardous Air Pollutants (NESHAP). This facility (plant number 56-01-023) is considered an existing large foundry by definition.

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

#### **Operating Limits:**

- A. The owner or operator shall inspect and maintain the control equipment (CE-22) according to the facility's (Plant No. 56-01-023) operation and maintenance plan.
- B. The owner or operator shall comply with the applicable requirements in 40 CFR Part 63, Subpart ZZZZZ – *National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources* [§63.10880 - §63.10906].

#### **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 compliance the following requirements:*

- A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
  - a. The date and time any inspection and/or maintenance was performed on the control equipment;
  - b. Any issues identified during the inspection;
  - c. Any issues addressed during the maintenance activities; and
  - d. Identification of the staff member performing the maintenance or inspection.
- B. The owner or operator shall comply with the applicable recordkeeping and reporting requirements in §63.10899.

Authority for Requirement: DNR Construction Permit 87-A-141-S1

#### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 22

Stack Opening (inches, dia.): 14 X 21

Exhaust Flow Rate (scfm): 9,650

Exhaust Temperature (°F): 120

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 87-A-141-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 either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-18**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-32  
Emissions Control Equipment ID Number: CE-17  
Emissions Control Equipment Description: Fabric Filter Baghouse

---

Emission Unit vented through this Emission Point: EU-32  
Emission Unit Description: Graphite Mold Machining  
Raw Material/Fuel: graphite  
Rated Capacity: 174 lb/hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

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

DNR Construction Permit 76-A-113-S1

<sup>(1)</sup> An exceedance of the indicator opacity of 20% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM<sub>10</sub>

Emission Limit: 1.86 lb/hr

Authority for Requirement: DNR Construction Permit 76-A-113-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

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

DNR Construction Permits 76-A-113-S1

#### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 35

Stack Opening (inches, dia.): 18

Exhaust Flow Rate (scfm): 3,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 76-A-113-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 either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**CAM Plan for EP-18, EU-32 Baghouse**

*This emission point shall conform to the conditions listed below*

Emissions Unit

Process/Emission Unit: Graphite Mill Machining (EU-32)

Facility: Amsted Rail Company, Inc. – Keokuk Plant

Pollutant: PM, PM<sub>10</sub>

Emission Control Technique: Baghouse

Control Device Identification Number: CE-17

Emission Egress Point Identification Number: EP-18

Applicable Requirements

Particulate Matter (PM) Limit: 0.1 gr/dscf

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

DNR Construction Permit 76-A-113-S1

Particulate Matter (PM<sub>10</sub>) Limit: 1.86 lbs/hr.

Authority for Requirement: DNR Construction Permit 76-A-113-S1

Monitoring Approach

General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations	Baghouse pressure drop readings are performed daily.	Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material

	<p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>	<p>handling operations of this unit.</p> <p>If visible emissions are present and corrective action does not return the observation to no visible emissions, a Method 9 observation will be performed.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>
Indicator Range/Source	<p>Pressure drop: 2 to 9 in. H<sub>2</sub>O.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>	<p>Presence of visible emissions.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>
Data Collection Frequency	<p>Daily: Pressure drop observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>	<p>Weekly: Visible emissions observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.
QA/QC	N/A—None	Visible emissions observer trained per Method 22. Opacity observer trained and certified per Method 9.

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-20**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-7  
Emissions Control Equipment ID Number: CE-19  
Emissions Control Equipment Description: Baghouse

---

Emission Unit vented through this Emission Point: EU-7  
Emission Unit Description: Hot Wheel Grinders  
Raw Material/Fuel: Steel wheels  
Rated Capacity: 90 wheels/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: 10%  
Authority for Requirement: 567 IAC 23.3(2)"d"  
DNR Construction Permit 97-A-537

Pollutant: PM<sub>10</sub>  
Emission Limit: 1.6 lb/hr  
Authority for Requirement: DNR Construction Permit 97-A-537

Pollutant: Particulate Matter (PM)  
Emission Limit: 0.05 gr/dscf  
Authority for Requirement: 567 IAC 23.4(6)  
DNR Construction Permit 97-A-537

#### **Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 53.4  
Stack Opening (inches, dia.): 38.4  
Exhaust Flow Rate (acfm): 21,000  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical, Unobstructed  
Authority for Requirement: DNR Construction Permit 97-A-537

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

**CAM Plan for EP-20, EU-7 Baghouse**

*This emission point shall conform to the conditions listed below*

Emissions Unit

Process/Emission Unit: Hot Wheel Grinders (EU-7)  
 Facility: Amsted Rail Company, Inc. – Keokuk Plant  
 Pollutant: PM, PM<sub>10</sub>  
 Emission Control Technique: Baghouse  
 Control Device Identification Number: CE-19  
 Emission Egress Point Identification Number: EP-20

Applicable Requirements

Particulate Matter (PM) Limit: 0.05 gr/dscf  
 Authority for Requirement: DNR Construction Permit 97-A-537

Particulate Matter (PM<sub>10</sub>) Limit: 1.6 lbs/hr.  
 Authority for Requirement: DNR Construction Permit 97-A-537

Monitoring Approach

General Monitoring Approach	Pressure drop readings	Visible emissions observations
Monitoring Methods and Locations Monitoring Methods and Locations (continued)	Baghouse pressure drop readings are performed daily. The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.	Visible emissions observations via Method 22 are performed weekly to ensure no visible emissions during the material handling operations of this unit.

	<p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>	<p>If visible emissions are present and corrective action does not return the observation to no visible emissions, a Method 9 observation will be performed.</p> <p>The cleaning sequence, air delivery system, and hopper functions of the baghouse are inspected monthly to insure equipment is operating properly.</p> <p>Bags are inspected for leaks or wear on a quarterly basis.</p> <p>All baghouse components are inspected every 6 months to insure proper operation.</p>
Indicator Range/Source	<p>Pressure drop: 2 to 9 in. H<sub>2</sub>O.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>	<p>Presence of visible emissions.</p> <p>Leaks, abnormal conditions, wear, and/or plugging of equipment and/or bags.</p>
Data Collection Frequency	<p>Daily: Pressure drop observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>	<p>Weekly: Visible emissions observations.</p> <p>Monthly, Quarterly and semiannually: Equipment inspections.</p>
Averaging Period	N/A—None	N/A—None
Recordkeeping	Records of pressure drop observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.	Records of visible emission observations, equipment inspections, and any actions resulting from observations or inspections are maintained on-site.
QA/QC	N/A—None	Visible Emissions observer trained per Method 22. Opacity observer trained and certified per Method 9

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-21**

Associated Equipment

Associated Emission Unit ID Numbers: EU-35

---

Emission Unit vented through this Emission Point: EU-35

Emission Unit Description: Road and Landfill

Raw Material/Fuel: fugitive dust

Rated Capacity: 13.39 VMT/day

**Applicable Requirements**

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

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

Pollutant: Fugitive Dust

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

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-37**

### Associated Equipment

Associated Emission Unit ID Numbers: EU37 Cooling Tower

---

Emission Unit vented through this Emission Point: EU37 Cooling Tower

Emission Unit Description: Cooling Tower

Raw Material/Fuel: Water

Rated Capacity: 3,200 gal/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: 40%

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

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

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

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

#### Operating Limits

The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 2,500 ppm for any single sampling event.

#### Operating Condition Monitoring

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.

The performance testing on the Total Dissolved Solids (TDS) concentrations shall be completed at a minimum of once per calendar quarter. Testing done to determine TDS concentrations for all on-site water usage from a common sump 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 13-A-361

**Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 14  
Stack Diameter (inches): 156  
Exhaust Flow Rate (acfm): 219,344 (per cell)  
Exhaust Temperature (°F): 115  
Discharge Style: Vertical, Unobstructed  
Authority for Requirement: DNR Construction Permit 13-A-361

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-39**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-39  
Emissions Control Equipment ID Number: CE-39  
Emissions Control Equipment Description: Cartridge Filters

---

Emission Unit vented through this Emission Point: EU-39  
Emission Unit Description: Graphite/Clay Ingate Lathe Machine  
Raw Material/Fuel: Removed graphite  
Rated Capacity: 6.0 lb/hr

### **Applicable Requirements**

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

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

Pollutant: Opacity  
Emission Limit: 40%<sup>(1)</sup>  
Authority for Requirement: 567 IAC 23.3(2)"d"  
DNR Construction Permit 16-A-062

<sup>(1)</sup> An exceedance of the indicator opacity of 25% 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: 0.1 gr/dscf  
Authority for Requirement: 567 IAC 23.3(2)"a"(1)  
DNR Construction Permit 16-A-062

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

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

#### NESHAP

This source is subject to Subparts A (*General Provisions*; 40 CFR §63.1 – 40 CFR §63.15) and ZZZZZ (*National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources*; 40 CFR §63.10880 – 40 CFR §63.10906) of the National Emission Standards for Hazardous Air Pollutants (NESHAP). This facility (plant number 56-01-023) is considered an existing large foundry by definition.

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

**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:*

- A. The owner or operator shall inspect and maintain the control equipment (CE-39) according to the facility’s (Plant No. 56-01-023) operation and maintenance plan.
  - 1. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
    - i. The date and time any inspection and/or maintenance was performed on the control equipment;
    - ii. Any issues identified during the inspection;
    - iii. Any issues addressed during the maintenance activities; and
    - iv. Identification of the staff member performing the maintenance or inspection.

**Emission Point Characteristics**

*This emission point shall conform to the conditions listed below.*

Stack Height (ft. from the ground): 36  
 Stack Diameter (inches): 8.5  
 Exhaust Flow Rate (scfm): 600  
 Exhaust Temperature (°F): 68  
 Discharge Style: Vertical, Unobstructed  
 Authority for Requirement: DNR Construction Permit 16-A-062

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

*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 this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-40**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-38

---

Emission Unit vented through this Emission Point: EU-38  
Emission Unit Description: Natural Gas Fired Emergency Generator  
Raw Material/Fuel: natural gas  
Rated Capacity: 62 Bhp

### **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.*

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

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limit(s): 500 ppmv  
Authority for Requirement: 567 IAC 23.3(3)"e"

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

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

#### **NESHAP:**

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)(iii) this emergency engine, located at an area source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(1), a new stationary RICE located at an area source of HAP emissions must meet the requirements of Part 63 by meeting the requirements of 40 CFR part 60 subpart JJJJ for spark ignition engines. No further requirements apply for this engine under Part 63.

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

## NSPS Subpart JJJJ Requirements

**For 25 hp < Engines < 100 hp, constructed after 6/12/2006 and manufactured on or after 1/1/2009:**

**Emergency, SI, All Fuel (except Gasoline & Rich Burn LPG)**

### Emission Standards:

(40 CFR 60.4233(d) and Table 1 to Subpart JJJJ)

Maximum Engine Power	Manufacture Date	Emission Standards <sup>(1)</sup>						
		g/HP-hr				ppmvd at 15% O <sub>2</sub>		
		NO <sub>x</sub>	HC + NO <sub>x</sub>	CO	VOC <sup>(2)</sup>	NO <sub>x</sub>	CO	VOC
25 < HP < 130	1/1/2009+	N/A	10	387	N/A	N/A	N/A	N/A

<sup>(1)</sup> Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O<sub>2</sub>.

<sup>(2)</sup> Formaldehyde emissions are not included.

### Compliance Demonstrations:

1. You must demonstrate compliance with the emission standards according to one of following methods (40 CFR 60.4243(b)):

- a) Purchasing a certified engine that complies with the emission standards, or
- b) Purchasing a non-certified engine and demonstrating compliance with the emission standards. You must keep a maintenance plan and records of conducted maintenance 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 performance tests to demonstrate compliance in accordance with 40 CFR 60.4244. Owners and operators 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 4243(b) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
25 < HP ≤ 500	Required	Not required

2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of required maintenance. 40 CFR 60.4243(b)(1), 4243(a) and 4245(a)(2).
3. Owners and operators of natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, a performance test must be conducted to demonstrate compliance with the emission standards. 40 CFR 60.4243(e).
4. If you are an owner or operator of engine ≤ 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing, but you are not required to conduct subsequent performance testing unless the engine is rebuilt or undergoes major repair or maintenance. 40 CFR 60.4243(f).

5. Owners and operators of certified engines must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).
6. Owners and operators of non-certified engines or certified engines operating in a non-certified manner must keep documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).

**Operating and Recordkeeping Requirements (40 CFR 4243(d))**

1. Owners and operators of the following emergency SI engines that do not meet the applicable standards for non-emergency engines must install a non-resettable hour meter. 40 CFR 60.4237.

Maximum Engine Power	Engine Was Built On Or After
HP < 130	7/1/2008

2. There is no time limit on the use of the emergency engine in emergency situations.
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used 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.
5. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.
6. Owners and operators of the following emergency SI that does not meet the applicable standards for a non-emergency engine must keep the following records. 40 CFR 60.4245(b).

Maximum Engine Power	Manufactured On Or After	Recordkeeping Requirement
25 < HP < 130	7/1/2008	Hours of operation recorded through a non-resettable hour meter. The owner or operator must 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.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-41**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-42

---

Emission Unit vented through this Emission Point: EU-42

Emission Unit Description: Gasoline Tank #1

Raw Material/Fuel: gasoline

Rated Capacity: 300 gallons

### **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.*

#### **NESHAP Applicability**

The tank is subject to 40 CFR 63 Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities. According to 40 CFR 63.11112(b) this storage tank, located at an area source, is a new storage tank as it was constructed after November 9, 2006.

#### **§63.11115 What are my general duties to minimize emissions?**

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

- (a) You must, at all times, 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. 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, review of operation and maintenance records, and inspection of the source.
- (b) You must keep applicable records as specified in §63.11125(d).

#### **§63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.**

- (a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - (1) Minimize gasoline spills;
  - (2) Clean up spills as expeditiously as practicable;
  - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

- (b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- (c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
- (d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

**§63.11125 What are my recordkeeping requirements?**

(d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.

- (1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
- (2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

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

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

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

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

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

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

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

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

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
  - a. The date, place and time of sampling or measurements
  - b. The date the analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.

- e. The results of such analyses; and
  - f. The operating conditions as existing at the time of sampling or measurement.
  - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
  - b. Maintain a log at the permitted facility of the scenario under which it is operating.
  - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

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

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

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

**G13. Hazardous Release**

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

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

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control

equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

## 2. Excess Emissions Reporting

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

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

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

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

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

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

In any enforcement proceeding, the permittee seeking to establish the occurrence of an

emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

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

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

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

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

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

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
- e. The changes comply with all applicable requirements.
- f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
  - i. A brief description of the change within the permitted facility,
  - ii. The date on which the change will occur,
  - iii. Any change in emission as a result of that change,
  - iv. The pollutants emitted subject to the emissions trade
  - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
  - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
  - vii. Any permit term or condition no longer applicable as a result of the change.

*567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule.

Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

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

### 1. Administrative Amendment.

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

### 2. Minor Title V Permit Modification.

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
  - i. Do not violate any applicable requirement;
  - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
  - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
  - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
  - v. Are not modifications under any provision of Title I of the Act; and
  - vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - ii. The permittee's suggested draft permit;
  - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
  - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

### 3. Significant Title V Permit Modification.

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

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

**G19. Duty to Obtain Construction Permits**

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

**G20. Asbestos**

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

**G21. Open Burning**

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

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

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedances of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

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

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

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

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

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

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

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
- a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
  - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
- a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
  - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
  - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*
5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

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

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
- a. Such applicable requirements are included and are specifically identified in the permit; or
  - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:
- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
  - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

**G26. Severability**

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

**G27. Property Rights**

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

**G28. Transferability**

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

**G29. Disclaimer**

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

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

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
Wallace State Office Building  
502 E 9<sup>th</sup> St.  
Des Moines, IA 50319-0034  
(515) 725-9526

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

**Field Office 2**  
2300-15th St., SW  
Mason City, IA 50401  
(641) 424-4073

**Field Office 3**  
1900 N. Grand Ave.  
Spencer, IA 51301  
(712) 262-4177

**Field Office 4**  
1401 Sunnyside Lane  
Atlantic, IA 50022  
(712) 243-1934

**Field Office 5**  
Wallace State Office Building  
502 E 9<sup>th</sup> St.  
Des Moines, IA 50319-0034  
(515) 725-0268

**Field Office 6**  
1023 West Madison Street  
Washington, IA 52353-1623  
(319) 653-2135

**Polk County Public Works Dept.**  
Air Quality Division  
5885 NE 14th St.  
Des Moines, IA 50313  
(515) 286-3351

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

## **Appendix A: Links to Standards**

40 CFR 60 Subpart JJJJ – New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines

<https://www.law.cornell.edu/cfr/text/40/part-60/subpart-JJJJ>

40 CFR 63 Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

<https://www.law.cornell.edu/cfr/text/40/part-63/subpart-CCCCCC>

40 CFR 63 Subpart ZZZZZ – National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

<https://www.law.cornell.edu/cfr/text/40/part-63/subpart-ZZZZZ>

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

<https://www.law.cornell.edu/cfr/text/40/part-63/subpart-ZZZZ>

