

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

Name of Permitted Facility: Griffin Pipe Products Co.
Facility Location: 2601 9th Ave., Council Bluffs, IA 51501
Air Quality Operating Permit Number: 00-TV-016R1
Expiration Date: June 20, 2012
Permit Renewal Application Deadline: December 20, 2011

EIQ Number: 92-2303
Facility File Number: 78-01-012

Responsible Official

Name: Paul Ciolino
Title: President
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Permit Contact Person for the Facility

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

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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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
gal/hr.	gallons per hour
gr./dscf	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa 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 ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Griffin Pipe Products Co.

Permit Number: 00-A-016R1

Facility Description: Ductile Iron Water Pipe Manufacturer (SIC 3321)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP-1	EU-1	Cupola	71-A-009-S3
EP-2	EU-1	Cupola	71-A-009-S6
	EU-4	Magnesium Inoculation	
EP-4A	EU-7	Annealing Furnace - Small Diameter	96-A-693-S1
EP-8	EU-8	Weight Hopper Loading, (Transporter)	NA
EP-9	EU-9	Painting Of Ductile Iron Pipe	NA
EP-10	EU-10	Cement Unloading / Storage Bin	80-A-009
EP-12	EU-12	Shell Core Making Machine	NA
EP-15	EU-15	Lime/Cement Silo	83-A-042-S1
EP-16	EU-16	Lime/Cement Silo	83-A-043-S2
EP-27	EU-27	Annealing Furnace - Large Diameter	98-A-142-S2
EP-27A			99-A-372-S1
EP-28	EU-28	Core Drying Oven - Large Diameter	98-A-143-S2
EP-29	EU-29	Casting Ductile Iron Pipe In Permanent Molds	98-A-144-S2
EP-29A			98-A-386-S1
EP-30	EU-30	Sand Silo	98-A-145-S2
EP-31	EU-31	Cement Silo	98-A-146-S2
EP-32	EU-32	Paint Booth	98-A-147-S4
EP-33	EU-33	Large Diameter Core Making	98-A-148-S2
EP-35	EU-35-1	Welder	03-A-533
	EU-35-2	Welder	
	EU-35-3	Welder	
	EU-35-4	Welder	
	EU-35-5	Grinder	
	EU-35-6	Grinder	
	EU-35-7	Grinder	
	EU-35-8	Grinder	
	EU-35-9	Saw	
	EU-35-10	Plasma Cutter	
EP-36	EU-35-11	Touch Up Painting	03-A-534

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP-FUG-1	EU-51	Coke Rail Car Dumping	NA
	EU-52	Covered Coke Conveyor	
	EU-60	Limestone Storage Pile	
	EU-61	Limestone Truck Dumping	
	EU-62	Covered Belt Conveyor	
	EU-63	End Loading	
EP-FUG-2	EU-2	Desulfurization f Hot Iron	NA
	EU-3	Bull Ladle - Hot Metal Pouring	
	EU-6	Ductile Iron Pipe Casting - Permanent Molds	
	EU-17	Cupola Charge Handling	
	EU-19	Ladle Preheat	
EP-FUG-3	EU-8A	Cement Mixer	NA
EP-FUG-4	EU-11	Transfer Sand Aggregate to Bins	NA

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
SH	50 Space Heaters
HWH	6 Hot Water Heaters
PSH	17 Portable Space Heaters
MUAH	2 Make Up Air Heaters
EU-14	Small Diameter Finish Line Drying Oven
EU-22	Welding Troughs
EU-23	Maintenance Welding

II. Plant-Wide Conditions

Facility Name: Griffin Pipe Products Co.

Permit Number: 00-TV-016R1

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 from permit issuance

Commencing on: June 21, 2007

Ending on: June 20, 2012

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

Opacity (visible emissions): 40% opacity

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

Sulfur Dioxide (SO₂): 500 parts per million by volume

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

Particulate Matter (state enforceable only)¹:

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 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" (as revised 7/21/1999)

¹ Pending approval into Iowa's State Implementation Plan (SIP), paragraph 567 IAC 23.3(2)"a" (as revised 7/21/1999) is considered *state enforceable only*.

Particulate Matter²:

The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.

Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

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

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

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

Plant Wide Emission Limits

Pollutant: Single HAP

Emission Limit(s): 9.4 tons/yr.

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

Pollutant: Total HAP's

Emission Limit(s): 24.4 tons/yr.

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

² Paragraph 567 IAC 23.3(2)"a" (prior to 7/21/1999) is the general particulate matter emission standard currently in the Iowa SIP.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. Plant-wide record HAP emissions for each HAP and all HAPs per twelve-month rolling period.

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Griffin Pipe Products Co. is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Griffin Pipe Products Co. shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

III. Emission Point-Specific Conditions

Facility Name: Griffin Pipe Products Co.
Permit Number: **00-TV-016R1**

Emission Point ID Number: EP-1 (Uncaptured)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-1	Cupola	NA	Coke, Limestone, Scrap Iron	60 tons/hr.	NA

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

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

Pollutant: Sulfur Dioxide (SO₂)

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.

Work practice standards:

The records required by this compliance plan shall be maintained at the facility for a period of five years, and shall be made available to DNR upon request.

1. Please see Appendix A (Air Quality Administrative Consent Order 2003-AQ-32) for Work Practice Requirements.

Authority for Requirement: Air Quality Administrative Consent Order 2003-AQ-32

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-2

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-1	Cupola	CE-1: Combustion Chamber CE-2: Spray Tower	Coke, Limestone, Scrap Iron	60 tons/hr.	71-A-009-S7
EU-4	Magnesium Inoculation	CE-3: Wet Scrubber CE-4: Mist Eliminator	Magnesium, Iron	60 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(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 33.8 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

Pollutant: Particulate Matter

Emission Limit(s): 33.8 lb/hr.⁽²⁾, 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.00 lb/hr.⁽²⁾, 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 30.0 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 5.77 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 6.00 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

Pollutant: Lead (Pb)

Emission Limit(s): 0.78 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

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

Process throughput:

1. The production rate shall not exceed 235,150 tons of metal charged per twelve-month rolling period.
2. In addition to coke, the cupola may be fired with the following fuels. No more than 1 ton/hr of any of the alternative fuels may be fired in the cupola at any one time.

Alternative Fuel	Maximum Rate (tons/hr)
Wood	1
Rubber tires	1
Paper	1
Used paint	1
Roofing paper	1
Scrap plastic containers	1
Fuel oil	1

3. The sulfur content of any fuel used in the cupola shall not exceed 1% by weight.
4. Roofing paper that contains asbestos shall not be charged in the cupola.
5. The facility shall not charge rubber tires, roofing paper, or scrap plastic containers in the cupola until additional compliance tests are performed with these materials using the rates listed above.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The date, type of fuel used on that date, amount of each fuel used on that day, and the sulfur content of each fuel used.
2. A copy of a Material Safety Data Sheet (MSDS) for any roofing paper that is fired in the cupola.
3. For the first twelve (12) months of operation, determine the total tons of metal charged for each month of operation.
4. After the first twelve (12) months of operation, determine the cumulative tons charged on a rolling-12-month total for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

Work practice standards:

The records required by this compliance plan shall be maintained at the facility for a period of five years, and shall be made available to DNR upon request.

1. Please see Appendix A (Air Quality Administrative Consent Order 2003-AQ-32) for Work Practice Requirements.

Authority for Requirement: Air Quality Administrative Consent Order 2003-AQ-32

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 125

Stack Opening, (inches, dia.): 84

Exhaust Flow Rate (scfm): 84,530

Exhaust Temperature (°F): 167

Discharge Style: Vertical w/o Rain Cap or w/ Unobstructing Rain Cap

Authority for Requirement: Iowa DNR Construction Permit 71-A-009-S7

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

(Required for CE-1, CE-2, CE-3, and CE-4 for Particulate Matter, PM₁₀, Sulfur Dioxide, and Carbon Monoxide)

Authority for Requirement: 567 IAC 22.108(3)

**CUPOLA (EU-1) and MAGNESIUM INOCULATION (EU-4)
COMPLIANCE ASSURANCE MONITORING (CAM) PLAN
For EP-2**

1. **EQUIPMENT:** A water-cooled, hot blast, cupola with a 96" lined melting Zone is used to melt scrap iron. The cupola emission system uses a below the charge door take off, a gas fired combustion chamber(CE-1), a gas combustion quencher unit (primary cooler,CE-2), a high energy vane Venturi scrubber(CE-3), a large diameter mist eliminator(CE-4), an induced draft fan with a 125' high 84" diameter stack. Gases are withdrawn on the West side of the copula through a water-cooled duct. These carbon monoxide rich gases are combusted with the aid of gas-fired auxiliary burners. The auxiliary burners ignite and consume the combustible gases and particulate matter in the effluent gas stream. The hot gases then pass into the Heat Recuperator before they enter the primary cooler where they are rapidly cooled by a water spray network (Christmas tree). Large particulate matter is flushed from the gas stream by the Christmas tree water injection system. The gases next pass into the high energy scrubber where it is possible to vary the size of the vane opening to maintain a high pressure drop and high collection efficiency at various rates of system gas flow. The gases then pass through the mist eliminator which removes the remaining wetted particulate matter and spray carryover from the gas stream. The cleaned gases plus water vapor next pass through an induced draft fan which provides the driving force to overcome the systems draft losses. The gases finally exit to the atmosphere at the top of the 125' steel stack as a white water plume.

2. **Emission Limits**
 - A. **PM & PM-10:** 33.8 lb/hr, 0.1 gr/scf
Iowa DNR Construction Permit 71-A-009-S7; 567 IAC 23.3(2)"a"
 - B. **Sulfur Dioxide (SO₂):** 2.00 lb/hr, 500 ppmv
Iowa DNR Construction Permit 71-A-009-S7; 567 IAC 23.3(3)"e"
 - C. **Carbon Monoxide (CO):** 6.00 lb/hr.
Iowa DNR Construction Permit 71-A-009-S7

3. **Indicators to be monitored and their ranges:** During cupola operation while melting iron
 - A. **Combustion chamber temperature** – minimum 1300 degrees Fahrenheit; this temperature is necessary to convert CO to CO₂
 - B. **Scrubber differential pressure (DP)** - minimum 38 inches of water; this limit was established by emission stack tests done during 2000 through 2002.
 - C. These readings will be taken hourly while the cupola is in operation.

4. **Calibration**

An outside contractor at each shutdown calibrates all gauges and recorders.

5. **Record keeping and Reporting**
 - A. **Daily Emission System Log** (record of the hourly temperature and differential pressure readings)
 - B. **Maintenance repair work orders**
 - C. **Contract repair and replacement work orders** (calibration of gauges)

6. If indicators being monitored are outside of their range.
 - A. Immediately investigate to find the reason for the excursion
 - B. Evaluate the situation for remedies
 - C. Take the necessary action to return the item to its indicator range.

7. Justification

A. Background. As listed in Equipment the Emission System consists of a gas fired combustion chamber(CE-1), a gas combustion quencher and capture unit (primary cooler,CE-2), a high energy vane Venturi scrubber(CE-3), a large diameter mist eliminator(CE-4) and an induced draft fan with a 125' high 84" diameter stack.

B. Rational for selection of performance indicators. A minimum temperature of 1300 degrees Fahrenheit is necessary to destroy volatile organic compounds and convert CO to CO₂. Thus the temperature in the combustion chamber should be 1300 or greater when the cupola is melting metal to ensure combustion of pollutant-laden gases. The differential pressure across the vanes of the Venturi scrubber is a function of position of the vanes, of water flowing over the vanes and of the air flow through the vanes.

C. Stack testing

Pollutant	Rate	DP	Melt Rate	Date of test
TSP	0.091 gr/dscf	38-40	43.4 tons/hr	August 17, 2000
TSP	30.11 lb/hr	38-40	43.4 tons/hr	August 17, 2000
SO ₂	0.19 lb/hr	38-40	43.4 tons/hr	August 17, 2000
SO ₂	0.5 ppm	38-40	43.4 tons/hr	August 17, 2000
CO	3.91 lb/hr	38-40	43.4 tons/hr	August 17, 2000
CO	22.6 ppm	38-40	43.4 tons/hr	August 17, 2000
TSP	0.085 gr/dscf	40-42	53.6 tons/hr	April 19, 2001
TSP	28.74 lb/hr	40-42	53.6 tons/hr	April 19, 2001
TSP	0.051 gr/dscf	46-48	49.7 tons/hr	April 9, 2002
TSP	23.18 lb/hr	46-48	49.7 tons/hr	April 9, 2002
CO	2.23 lb/hr	42-46	54.5 tons/hr	November 5, 2002
CO	8.53 ppm	42-46	54.5 tons/hr	November 5, 2002

For these entire tests the temperature was above 1300 degrees Fahrenheit. These tests would establish a DP range between 38 and 48. All the above tests had pollutant emission rates less than our current limits.

Emission Point ID Number: EP-4A

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-7	Annealing Furnace - Small Diameter	NA	Natural Gas	73.4 MMBtu/hr.	96-A-693-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: Iowa DNR Construction Permit 96-A-693-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 96-A-693-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 96-A-693-S1
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Process throughput:

1. This source is limited to the use of natural gas and propane as fuel.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner/operator of this equipment shall maintain records of the fuel used in this unit.
Authority for Requirement: Iowa DNR Construction Permit 96-A-693-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 36

Stack Opening, (inches, dia.): 44

Exhaust Flow Rate (scfm): 4,700

Exhaust Temperature (°F): 500

Discharge Style: Vertical w/ Rain Cap

Authority for Requirement: Iowa DNR Construction Permit 96-A-693-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-8

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-8	Weight Hopper Loading (Transporter)	NA	Sand/Cement	4.3 tons/hr.	NA

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

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

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-9

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-9	Painting of Ductile Iron Pipe	NA	Pipe Coating	164 gal/hr.	NA

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

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-10

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-10	Cement Unloading/ Storage Bin	CE-7: Baghouse	Cement	15 tons/hr.	80-A-009

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

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

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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-12

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-12	Shell Core Making Machine	NA	Resin Coated Sand	0.6 tons/hr.	NA

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

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

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

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-15	Lime/Cement Silo	CE-5: Baghouse	Lime/Cement	15 tons/hr.	83-A-042-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 83-A-042-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 83-A-042-S1
567 IAC 23.3(2)"a"

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 47

Stack Opening, (inches): 3 x 12

Exhaust Flow Rate (scfm): 450

Exhaust Temperature (°F): Ambient

Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permit 83-A-042-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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-16

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-16	Lime/Cement Silo	CE-6: Baghouse	Lime/Cement	15 tons/hr.	83-A-043-S2

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 83-A-043-S2
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 83-A-043-S1
567 IAC 23.3(2)"a"

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 47

Stack Opening, (inches): 2 at 2 x 36 each

Exhaust Flow Rate (scfm): 1500

Exhaust Temperature (°F): Ambient

Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permit 83-A-043-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 Numbers: EP-27 and EP-27A

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-27	Annealing Furnace – Large Diameter	NA	Natural Gas	38.28 MMBtu/hr.	98-A-142-S2 (EP-27) 99-A-372-S1 (EP-27A)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits 98-A-142-S2 and 99-A-372-S1
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.77 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permits 98-A-142-S2 and 99-A-372-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.77 lb/hr.⁽²⁾, 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permits 98-A-142-S2 and 99-A-372-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.44 lb/hr.⁽²⁾, 500 ppmv

Authority for Requirement: Iowa DNR Construction Permits 98-A-142-S2 and 99-A-372-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 3.65 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permits 98-A-142-S2 and 99-A-372-S1

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 0.37 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permits 98-A-142-S2 and 99-A-372-S1

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 0.82 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permits 98-A-142-S2 and 99-A-372-S1

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs

⁽³⁾ Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Process throughput:

1. This emission unit shall operate on either natural gas or propane.
2. This unit shall not burn more than 133.98 billion BTUs of fuel per twelve (12) month rolling period.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The date, type of fuel used on that date, and amount of fuel used.
2. After the first twelve (12) months of operation, determine the cumulative BTUs of fuel that have been burned on a rolling-12-month total for each month of operation.

Authority for Requirement: Iowa DNR Construction Permits 98-A-142-S2 and 99-A-372-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Emission Point	EP-27	EP-27A
Stack Height, (ft, from the ground)	60	53
Stack Opening, (inches, dia.)	42	22
Exhaust Flow Rate (scfm)	7,400	1,700
Exhaust Temperature (°F)	1,800	1,400
Discharge Style	Vertical Unobstructed	Vertical Unobstructed
Authority for Requirement	98-A-142-S1	99-A-372-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-28

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-28	Core Drying Oven – Large Diameter	NA	Natural Gas	4 MMBtu/hr.	98-A-143-S2

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.08 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.08 lb/hr.⁽²⁾, 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.05 lb/hr.⁽²⁾, 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 0.38 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 0.04 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 0.09 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs

⁽³⁾ Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Process throughput:

1. This emission unit shall operate on either natural gas or propane.
2. This unit shall not burn more than 14 billion BTUs of fuel per twelve (12) month rolling period.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The date, type of fuel used on that date, and amount of fuel used.
2. After the first twelve (12) months of operation, determine the cumulative BTUs of fuel that have been burned on a rolling-12-month total for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 38

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 2,600

Exhaust Temperature (°F): 500

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 98-A-143-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP-29 and EP-29A

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-29	Casting Ductile Iron Pipe	NA	Iron	35 tons/hr.	98-A-144-S2 (EP-29) 98-A-386-S1 (EP-29A)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits 98-A-144-S2 and 98-A-386-S1
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 6.26 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permits 98-A-144-S2 and 98-A-386-S1

Pollutant: Particulate Matter

Emission Limit(s): 14.58 lb/hr.⁽²⁾, 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permits 98-A-144-S2 and 98-A-386-S1
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 0.04 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permits 98-A-144-S2 and 98-A-386-S1

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs

⁽³⁾ Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Process throughput:

- 1. This unit shall not process more than 420 tons of pipes per day (This is equivalent to 12 hours per day @ the requested limit of 35 tons/hr).
- 2. This unit shall not process more than 128,000 tons of pipes per twelve (12) month rolling period.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- 1. The date and the tons of pipes processed that day by this unit.
- 2. After the first twelve (12) months of operation, determine the cumulative tons of pipes that have been processed by this unit on a rolling-12-month total for each month of operation.

Authority for Requirement: Iowa DNR Construction Permits 98-A-144-S2 and 98-A-386-S1

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 48

Stack Opening, (inches, dia.): 72

Exhaust Flow Rate (scfm): 55,500

Exhaust Temperature (°F): 145

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permits 98-A-144-S2 and 98-A-386-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-30

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-30	Sand Silo	CE-30: Baghouse	Sand	20 tons/hr.	98-A-145-S2

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-145-S2
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.13 lb/hr.⁽²⁾, 0.23 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-145-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.13 lb/hr.⁽²⁾, 0.23 tons/yr.⁽³⁾, 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 98-A-145-S2
567 IAC 23.3(2)"a"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs

⁽³⁾ Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Process throughput:

1. This unit shall not store more than 70,000 tons of material per twelve (12) month rolling period.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. After the first twelve (12) months of operation, determine the cumulative tons of material loaded into this unit on a rolling-12-month total for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 98-A-145-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 61

Stack Opening, (inches): 5 x 4

Exhaust Flow Rate (scfm): 1,500

Exhaust Temperature (°F): 70

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 98-A-145-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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-31

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-31	Cement Silo	CE-31: Baghouse	Cement	20 tons/hr.	98-A-146-S2

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-146-S2
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.13 lb/hr.⁽²⁾, 0.23 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-146-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.13 lb/hr.⁽²⁾, 0.23 tons/yr.⁽³⁾, 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 98-A-146-S2
567 IAC 23.3(2)"a"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs

⁽³⁾ Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Process throughput:

1. This unit shall not store more than 70,000 tons of material per twelve (12) month rolling period.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. After the first twelve (12) months of operation, determine the cumulative tons of material loaded into this unit on a rolling-12-month total for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 98-A-146-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 61

Stack Opening, (inches): 5 x 4

Exhaust Flow Rate (scfm): 1,500

Exhaust Temperature (°F): 70

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 98-A-146-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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-32

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-32	Paint Booth	NA	Pipe Coating	Inside Gun 18.8 gal/hr. Outside Gun 22.5 gal/hr.	98-A-147-S4

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-147-S4
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 1.5 lb/hr.⁽²⁾, 2.6 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-147-S4

Pollutant: Particulate Matter

Emission Limit(s): 1.5 lb/hr.⁽²⁾, 2.6 tons/yr.⁽³⁾, 0.01 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 98-A-147-S4
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 38.9 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-147-S4

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs

⁽³⁾ Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The name of each material to be used in the paint booth and maximum VOC content of each material to be used.
2. A copy of the Material Safety Data Sheet (MSDS) for each material to be used in the paint booth.
3. The date, the material used, the VOC content (in lb/gal) of the material used, and the total amount of the material used for that day (in gallons/day).
4. The total VOCs for the paint booth for each day of operation.
5. After the first twelve (12) months of operation, determine the total emissions for VOCs for the paint booth on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 98-A-147-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 45

Stack Opening, (inches, dia.): 44

Exhaust Flow Rate (scfm): 24,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 98-A-147-S4

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-33

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-33	Large Diameter Core Making	CE-33: Packed Bed Scrubber	Sand/Binders	4.08 tons/hr.	98-A-148-S2

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-148-S2
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.38 lb/hr.⁽²⁾, 0.7 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-148-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.45 lb/hr.⁽²⁾, 0.8 tons/yr.⁽³⁾, 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 98-A-148-S2
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.45 lb/hr.⁽²⁾, 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 98-A-148-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 5.48 lb/hr.⁽²⁾, 9.58 tons/yr.⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 98-A-148-S2

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs

⁽³⁾ Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Process throughput:

1. This unit is limited to 14,280 tons of sand per twelve (12) month rolling period.
2. The maximum molecular weight of the gaseous hardening agent shall not exceed 101 lb/lb-mole.

Control equipment parameters:

1. The scrubbing agent for the packed bed scrubber shall be sulfuric acid.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The name of all gaseous hardening agents used and the maximum molecular weight.
2. A copy of the Material Safety Data Sheet (MSDS) for all gaseous hardening agents.
3. After the first twelve (12) months of operation, determine the cumulative tons sand used by this unit on a rolling-12-month total for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 98-A-148-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 38

Stack Opening, (inches, dia.): 20

Exhaust Flow Rate (scfm): 7,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 98-A-148-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

**LARGE DIAMETER CORE SCRUBBER (EU-33) COMPLIANCE
ASSURANCE MONITORING (CAM) PLAN
For EP-33**

1. EQUIPMENT: A four foot diameter (twenty foot tall) polypropylene tower with a liquid sump (400 gallons) and six foot height of Tellerette # 2 type R packing balls. The gaseous hardening agent is pulled off the Large Diameter Core Making Machine through the packing balls. A water sulfuric acid solution is pumped over the packed bed.
2. Emission Limits:
 - A. PM: 0.45 lbs/hr, 0.8 tons/year, 0.1gr/scf
Iowa DNR Construction Permit 98-A-148-S2; 567 IAC 23.3(2)"a"
 - B. PM-10: 0.38 lbs/hr, 0.7 tons/year,
Iowa DNR Construction Permit 98-A-148-S2
 - C. Sulfur Dioxide (SO₂): 0.45 lb/hr, 500 ppmv
Iowa DNR Construction Permit 98-A-148-S2; 567 IAC 23.3(3)"e"
 - D. Volatile Organic Compounds (VOC's): 5.48 lbs/hr, 9.58 tons/year
Iowa DNR Construction Permit 98-A-148-S2
3. Indicators to be monitored and their ranges: Manufacture Recommendations
 - A. Liquid flow across the packed bed; minimum of 50 gpm
 - B. Differential Pressure across the packed bed; 0.4 to 3.5 inches of water
 - C. pH of the liquid; 0.0 to 4.5
4. Calibration
A plant electrician calibrates pH meter as required. Other gauges are replaced when they go bad.
5. Record keeping and Reporting
 - A. Scrubber Log (record the liquid flow rate, differential pressure and pH at the start of each day's core production)
 - B. Maintenance repair work orders
 - C. Repair and replacement work orders.
 - D. Record of acid replacement
6. If indicators being monitored are outside of their range.
 - A. Immediately investigate to find the reason for the excursion
 - B. Evaluate the situation for remedies
 - C. Take the necessary action to return the item to its indicator range.
7. Justification
 - A. Background: This unit is a packed bed scrubber. The gaseous hardening agent and particulate matter is pulled off the Large Diameter Core Making Machine. This air stream is blown up through the packing balls. A water sulfuric acid solution is pumped over the packed bed to catch the hardening agent and the particulates.
 - B. Rational for selection of performance indicators. Per the manufacture the pressure differential (DP) should be between 0.4 and 3.5 inches of water. A DP less than 0.4 means there is insufficient air flow. A DP greater than 3.5 means the packing is becoming plugged. The liquid flow rate should be greater than 50 gpm to provide sufficient liquid to react with hardening agent. The pH of the liquid should be less than 4.5 to ensure that there is enough H₂SO₄ to react with the hardening agent.
 - C. Results from Stack testing on March 7, 2001 were TSP less than 0.15 lbs/hr and 0.0041gr/dscf. VOC emission rate was an average of 38.43 ppm and 1.12 lb/hr. During this testing the DP was 0.7, flow was 80 gpm and pH was 1.34.

Emission Point ID Number: EP-35 (Vents Inside)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-35-1	Welder	CE-35: Dust Collector	Pipe	2 tons/hr.	03-A-533
EU-35-2	Welder				
EU-35-3	Welder				
EU-35-4	Welder				
EU-35-5	Grinder				
EU-35-6	Grinder				
EU-35-7	Grinder				
EU-35-8	Grinder				
EU-35-9	Saw				
EU-35-10	Plasma Cutter				

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-533
567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 1.50 lb/hr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-533

Pollutant: Particulate Matter

Emission Limit(s): 1.5 lb/hr.⁽²⁾, 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 03-A-533
567 IAC 23.3(2)"a"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾Standard is expressed as the average of 3 runs

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): 6,400

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 03-A-553

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-36 (Vents Inside)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-36	Touch Up Painting	NA	Paint	0.1 gallons/hr.	03-A-534

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-534
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 03-A-534
567 IAC 23.4(13)"d"

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 2.0 tons/yr.⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-534

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Process throughput:

1. Painting in the RJ Process Building shall be limited to aerosol spray cans and hand-applied coatings. Spray guns are not allowed for use in the RJ Process Building. Total VOCs shall not exceed 2.0 tons per twelve-month rolling period.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. VOC usage shall be recorded on a monthly basis. Emissions shall be calculated using a twelve-month rolling total. Once VOC emissions exceed 1.5 tons, VOC usage shall be recorded on a daily basis and calculated using a 365-day rolling total. (NOTE: Recordkeeping may revert from daily back to a rolling twelve-month total provided that the recordkeeping demonstrates that VOC emissions do not exceed 1.0 ton in the past twelve-months).
2. Maintain MSDS for all materials used.

Authority for Requirement: Iowa DNR Construction Permit 03-A-534

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): NA

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 03-A-534

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-FUG-1

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-51	Coke Rail Dumping	NA	Coke	50 tons/hr.	NA
EU-52	Covered Coke Conveyor		Coke	50 tons/hr.	
EU-60	Limestone Storage Pile		Limestone	1,000 ft ² /hr.	
EU-61	Limestone Truck Dumping		Limestone	100 tons/hr.	
EU-62	Covered Belt Conveyor		Limestone	100 tons/hr.	
EU-63	End Loading		Limestone	100 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(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

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

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-FUG-2

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-2	Desulfurization of Hot Iron	NA	Hot Iron	60 tons/hr.	NA
EU-3	Bull Ladle – Hot Metal Pouring		Hot Iron	60 tons/hr.	
EU-6	Ductile Iron Pipe Casting – Permanent Molds		Hot Iron	60 tons/hr.	
EU-17	Cupola Charge Handling		Scrap Metal Limestone Coke	60 tons/hr.	
EU-19	Ladle Preheat		Natural Gas	7.86 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): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

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

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-FUG-3

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-8A	Cement Mixer	CE-9: Baghouse	Cement/Sand	4.3 tons/hr.	NA

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

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

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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-FUG-4

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-11	Transfer Sand Aggregate to Bins	CE-8: Baghouse	Sand	20 tons/hr.	NA

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

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

G1. Duty to Comply

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

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *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 present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, 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 EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. 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 following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
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) 281-8694 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. 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. Oral 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 oral 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 oral report may be made 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 oral 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 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 must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *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.
 - e. The changes comply with all applicable requirements.
 - f. For such a 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 is required to do 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 Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

- i. Do not violate any applicable requirements
- 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 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.

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 a 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, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant 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, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113 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 22.105(1)"a"(4)

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 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, training fires and controlled burning of a demolished building. 567 IAC 23.1(3)"a", and 567 IAC 23.2

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"h"; 567 IAC 23.2(3)"h" - *State Only*

G22. Acid Rain (Title IV) Emissions Allowances

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

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

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

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

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
 5. The permittee shall be allowed to switch from any ozone-depleting substance 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 June 25, 1993.
 - 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 June 25, 1993, 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)*

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 to determine transferability of the permit. *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 an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. 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. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. 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
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

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

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

G31. Prevention of Air Pollution Emergency Episodes

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

567 IAC 26.1(1)

G32. Contacts List

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

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(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
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

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

401 SW 7th Street, Suite I
Des Moines, IA 50309
(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 Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix A - Air Quality Administrative Consent Order 2003-AQ-32

File Name 78-01-012

Senders initials _____

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER**

<p>IN THE MATTER OF:</p> <p>GRIFFIN PIPE PRODUCTS COMPANY</p>	<p>ADMINISTRATIVE CONSENT ORDER NO. 2003-AQ-32</p>
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TO: Griffin Pipe Products Company
2601 9th Avenue
Council Bluffs, Iowa 51501

CT Corporation System
Registered Agent
2222 Grand Avenue
Des Moines, Iowa 50312

Paul T. Ciolino
President
1400 Opus Place, Suite 700
Downers Grove, Illinois 60515

Ward A. Stout
Vice President, Operations
1400 Opus Place, Suite 700
Downers Grove, Illinois 60515

I. SUMMARY

This order requires you to comply with the compliance plan attached as Exhibit "A" to reduce the risk of future excess emission episodes on the cupola stack; to comply with all compliance plans approved by the Department; to maintain and operate equipment at all times in a manner consistent with minimizing emissions; to make timely reports of excess emissions episodes; to comply with the conditions in your construction and operating permits; and to pay a penalty of \$10,000.00, subject to your appeal rights stated in this order.

Any questions regarding this order should be directed to:

Relating to technical requirements:

Holly Andersen
Iowa Department of Natural Resources
706 Sunnyside Lane
Atlantic, Iowa 50022
Phone: 712/243-1934

Relating to appeal rights:

Anne Preziosi
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Urbandale, Iowa 50322
Phone: 515/281-6243

Appeal, if any, addressed to:

Director, Iowa Dept. of Natural Resources
Henry A. Wallace Building
Des Moines, Iowa 50319-0034

Payment of penalty to:

Iowa Department of Natural Resources
Henry A. Wallace Building
Des Moines, Iowa 50319-0034

IOWA DEPARTMENT OF NATRUAL RESOURCES
ADMINISTRATIVE ORDER
ISSUED TO: Griffin Pipe Products Company

II. STATEMENT OF FACTS

1. The Griffin Pipe Products Company (Griffin Pipe) facility produces ductile iron pipe for the water and wastewater industry. The facility is located at 2601-9th Avenue, in Council Bluffs, Iowa. Residential areas are located to the north and west of the facility.

2. DNR has evidence that Griffin Pipe has committed the following violations of DNR's rules: **(1)** Griffin Pipe has had incidents of excess emissions, in violation of 567 IAC 24.1(4), on at least seven different occasions that are known to DNR; **(2)** DNR has evidence that Griffin Pipe has failed to maintain and operate its equipment at all times in a manner consistent with minimizing emissions, in violation of 567 IAC 24.2(1); **(3)** Griffin Pipe has failed to make timely oral reports of excess emissions, in violation on 567 IAC 24.1(2), following some of its excess emission incidents; **(4)** Griffin Pipe has failed to make timely written reports of excess emissions, in violation of 567 IAC 24.1(3), following some of its excess emissions incidents; **(5)** Griffin Pipe has failed to timely conduct stack testing as required by several of its construction permits; and **(6)** Griffin Pipe failed to meet emissions limits contained in several of its construction permits, when Griffin Pipe failed to show compliance during required stack tests.

3. **Griffin Pipe has had incidents of excess emissions, in violation of 567 IAC 24.1(4).** Excess emissions occurred on the following occasions that are known to DNR – November 17, 1998; March 2, 2000; May 17, 2001; July 20, 2001, November 3, 2001; December 6 and 7, 2001; and December 13, 2001. DNR rule 24.1(4) provides that an incident of excess emission, other than an incident during startup, shutdown or cleaning of control equipment, is a violation.

4. On November 19, 1998, Griffin Pipe sent the Department a letter regarding an outage on its air emission system. The incident occurred when a coupling between the fan motor and the Cupola emission fan broke. This incident was a violation of 567 IAC 24.1(4), the Department's excess emissions rule.

5. On March 2, 2000, Mr. Hansen of Griffin Pipe telephoned DNR Field Office 4 to report an incident of bypass of the emission system for about ten minutes. The incident occurred when a truck hit a guide wire and caused two electric lines to contact. The power surge blew out two fuses, stopping the emission fan. A written report was received on March 7, 2000. This incident was a violation of 567 IAC 24.1(4), the Department's excess emissions rule.

6. On May 17, 2001, Mr. Hansen telephoned Field Office 4 to report an upset in the cupola wet scrubber system. A power outage or surge caused the wet scrubber pump and afterburners to go offline. However, the dust collector kept running without control equipment. A written report regarding the incident was received by the Department on May 21, 2001. This was a violation of 567 IAC 24.1(4).

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7. On July 16, 2001, the Department received written notice from Griffin Pipe of an upset in the cupola wet scrubber system caused by a partial blockage in the duct above the wet scrubber doors. The blockage resulted from a refractory and buildup falling off the duct wall. This incident was a violation of 567 IAC 24.1(4), the Department's excess emissions rule.

8. On January 25, 2002, DNR and Griffin Pipe representatives met at the Council Bluffs facility to discuss a video submitted to DNR by a citizen complainant in December 2001. The video contained audio and visual footage of the Griffin Pipe facility in operation. After viewing the video, Griffin Pipe representatives agreed there was evidence of excess emissions in the video. Griffin Pipe requested time to analyze the footage and prepare a written response to DNR.

9. On January 28, 2002, DNR sent a letter to Griffin Pipe summarizing the January 25, 2002, meeting and requesting a written explanation of the excess emissions conditions shown on the videos. The dates of the upset episodes are November 3, 2001, December 6-7, 2001, and December 13, 2001.

10. On February 11, 2002, DNR received a written response dated February 7, 2002 from Mr. Hansen of Griffin Pipe. The letter confirmed that the excess emissions were being generated from the cupola stack (Emission Point 1). The letter identified operator error as the cause of the excess emissions during the burn-down operation of the system. Burn-down is the shutting down of the cupola for a designated period of time. Procedures of burn-down require the operator to close a metal cap below the charge door of the cupola to prevent any emissions from being discharged directly to the air while the molten iron is drained from the cupola. Upon investigation by Griffin, it was determined that the cap was being opened prematurely at the end of the burn-down process. In its letter, Griffin Pipe explained that procedures have been modified and personnel have been retrained to perform the proper burn-down procedure.

11. On March 12, 2002, DNR received an e-mail message from Robert Ribbing of Griffin. The message described the procedure that Griffin Pipe will initiate when an excess emission episode occurs on the cupola unit.

12. **DNR has evidence that Griffin Pipe failed to maintain and operate its equipment at all times in a manner consistent with minimizing emissions, in violation of 567 IAC 24.2(1).** A Griffin Pipe representative has stated to DNR personnel that operator error in the "burn-down" operation of its cupola system caused excess emissions from its Emission Point 1, as demonstrated by the video submitted to DNR.

13. **Griffin Pipe failed to make timely oral reports of excess emissions, in violation on 567 IAC 24.1(2) on the following dates: November 3, 2001; December 6 and 7, 2001; and December 13, 2001.**

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14. **Griffin Pipe has failed to make timely written reports of excess emissions**, in violation of 567 IAC 24.1(3), on the following dates: November 3, 2001; December 6 and 7, 2001; and December 13, 2001.

15. **Griffin Pipe failed to timely conduct stack testing as required by the five of its construction permits.** On November 2, 2000, Holly Andersen of Field Office 4 conducted a Title V compliance inspection of the facility. The inspection report documented the lack of stack testing of Emission Points 2, 29, 29A, 32, and 33 required by construction permits.

16. **Emission Point 2:** Air Quality Construction Permit No. 71-A-009-S2 was issued for Emission Point 2 (Cupola and Magnesium Innoculation) on September 21, 1999. The permit required compliance stack testing by March 21, 2000, for the following pollutants: TSP, PM10, SO2, NOx, VOCs, CO, and Pb. Stack testing was not conducted until August 17, 2000, and the stack test conducted on that date failed to show compliance with the permitted emission limits.

17. **Emission Points 29 and 29A:** Air Quality Construction Permit Nos. 98-A-144-S1 and 99-A-386 for Emission Points 29 and 29A (Casting Machine) were issued on June 16, 1999. The permits required compliance stack testing by December 16, 1999, for the following pollutants: TSP and PM10. Stack testing was not conducted until July 9, 2002, and the stack test conducted on that date failed to show compliance with the permitted emission limits.

18. **Emission Point 32:** Air Quality Construction Permit No. 98-A-147-S1 was issued on June 16, 1999, for Emission Point 32 (Paint Booth). The permit required compliance stack testing by December 16, 1999, for the pollutants TSP and PM10. Stack testing conducted on March 7, 2001, failed to demonstrate compliance with the permitted emission limits.

19. **Emission Point 33:** Air Quality Construction Permit No. 98-A-148-S1 was issued on June 16, 1999, for Emission Point 33 (Core Maker). The permit required compliance stack testing by December 16, 1999, for the pollutants TSP, PM10, and VOCs. Stack testing conducted on March 7, 2001, failed to demonstrate compliance with the permitted emission limit for VOCs. In addition, the equipment was not operated at maximum rated capacity during the test, as required.

20. **Griffin Pipe failed to meet emissions limits contained in the permits for Emission Points 2, 29, 29A, 32, and 33 when Griffin Pipe failed to show compliance during required stack tests.**

21. **Emission Point 2:** Stack tests conducted on August 17, 2000, failed to show compliance with the emission limits for PM10 and Pb contained in Air Quality Construction Permit No. 71-A-009-S2. Stack tests conducted on April 19, 2001, also failed to demonstrate compliance. Pursuant to the terms of a compliance plan submitted at DNR's request, a mist eliminator was installed on Emission Point 2 during the facility's December

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2001 shutdown. A stack test conducted on April 9, 2002, showed compliance with the Pb emission limit. However, the April 9, 2002, stack test results still indicated noncompliance with the permitted PM10 emission limit. Air Quality Construction Permit No. 71-A-009-S3 was issued on November 21, 2002, modifying the PM10 emission limit to allow compliance.

22. **Emission Points 29 and 29A:** Stack tests conducted on July 9, 2002, failed to show compliance with the emission limits for TSP and PM10 contained in Air Quality Construction Permit Nos. 98-A-144-S1 and 99-A-386. Air Quality Construction Permit Nos. 98-A-144-S2 and 99-A-386-S1 were issued on November 21, 2002, to allow the facility to raise the stack heights, to increase the emission limits, and to impose production limits. These changes to the permits allow compliance.

23. **Emission Point 32:** Stack tests conducted on March 7, 2001, failed to demonstrate compliance with the emission limits for TSP and PM10 contained in Air Quality Construction Permit No. 98-A-147-S1. A second stack test conducted on November 9, 2001, showed compliance with the permitted TSP and PM10 emission limits.

24. **Emission Point 33:** Stack tests conducted on March 7, 2001, failed to show compliance with the VOC emission limits contained in Air Quality Construction Permit No. 98-A-148-S1. In addition, the equipment was not operating at maximum rated capacity during the test, as required. The permit was amended on November 21, 2002, to increase the VOC emission limit.

III. CONCLUSIONS OF LAW

1. Pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1), which authorize the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II (air quality), and the rules promulgated and permits issued pursuant thereto; and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10, which authorize the Director to assess administrative penalties, this Department has jurisdiction to issue this order.

2. Iowa Code section 455B.133 provides for the Environmental Protection Commission to establish rules governing the quality of air and emission standards. Iowa Code section 455B.134(3) provides that the director of DNR shall grant, modify, suspend, terminate, revoke, reissue or deny permits for the construction or operation of new, modified, or existing air contaminant sources and for related control equipment.

3. 567 IAC 24.1(4) provides that an incident of excess emission, other than an incident during startup, shutdown or cleaning of control equipment, is a violation. Griffin Pipe has had incidents of excess emissions, in violation of 567 IAC 24.1(4), on the following occasions that are known to DNR –March 2, 2000; May 17, 2001; July 20, 2001, November 3, 2001; December 6 and 7, 2001; and December 13, 2001. Therefore, Griffin Pipe is not in compliance with this provision.

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4. 567 IAC 24.1(2) requires that an incident of excess emissions, other than one during startup, shutdown, or cleaning of control equipment, shall be reported to the appropriate regional office of the Department within eight hours of the incident, or at the start of the first working day following the onset of the incident. Griffin Pipe failed to report the November 3, 2001, December 6-7, 2002 and December 13, 2001 excess emission episodes within eight hours of the incident, or at the beginning of the first working day following the onset of the incident. Therefore, Griffin Pipe is not in compliance with this provision. Griffin Pipe failed to make timely oral reports of excess emissions, in violation on 567 IAC 24.1(2) on the above-mentioned dates.

5. 567 IAC 24.1(3) requires a written report of an incident of excess emissions to be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition. Griffin Pipe failed to submit the written report of the November 3, 2001, December 6-7, 2001, and December 13, 2001, excess emission episodes within seven days of the episodes. Therefore, Griffin Pipe is not in compliance with this provision. Griffin Pipe failed to make timely written reports of excess emissions, in violation of 567 IAC 24.1(3), on the same dates.

6. 567 IAC 24.2(1) requires that an owner or operator of any equipment or control equipment maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions. Griffin Pipe operated Emission Point 2 (Cupola and Magnesium Inoculation), Emission Points 29 and 29A (Casting Machine), Emission Point 32 (Paint Booth), and Emission Point 32 (Core Maker) out of compliance with its emission limits. According to Griffin's February 7, 2002, letter to DNR, operator error was identified as the cause of the excess emissions from Emission Point 1 during the burn down operation of the cupola system. The excess emission episodes were identified on the videotape submitted to the DNR AQB in December 2001. Therefore, Griffin Pipe has violated this provision. Further, DNR has evidence that Griffin Pipe has failed to maintain and operate its equipment at all times in a manner consistent with minimizing emissions, in violation of 567 IAC 24.2(1).

7. Pursuant to Iowa Code sections 455B.133 and 455B.134, 567 IAC 22.3(3) was established, which provides that a permit may be issued subject to conditions specified in the permit. Such conditions may include but are not limited to emission limits, operating conditions, fuel specifications, compliance testing, continuous monitoring, and excess emission reporting. Griffin Pipe failed to timely conduct stack testing as required by five of its construction permits.

8. Pursuant to Iowa Code sections 455B.133 and 455B.134, 567 IAC 22.3(3) was established, which provides that a permit may be issued subject to conditions specified in the permit. Such conditions may include but are not limited to emission limits, operating conditions, fuel specifications, compliance testing, continuous monitoring, and excess emission reporting. Griffin Pipe failed to meet emissions limits contained in the following construction permits: Air Quality Construction Permit No. 71-A-009-S2 (Emission Point 2 - Cupola and Magnesium Inoculation), Air Quality Construction Permit No. 98-A-144-S1

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(Emission Point 29 - Casting Machine), Air Quality Construction Permit No. 99-A-386 (Emission Point 29A - Casting Machine), Air Quality Construction Permit No. 98-A-147-S1 (Emission Point 32 - Paint Booth), and Air Quality Construction Permit No. 98-A-148-S1 (Emission Point 33 - Core Maker) when Griffin Pipe failed to show compliance during the required stack tests. Therefore, Griffin Pipe has failed to comply with this provision.

IV. ORDER

THEREFORE, DNR orders and Griffin Pipe Products Company agrees to the following:

1. Comply with the attached Compliance Plan (Exhibit "A") describing the actions employees shall take if an excess emissions episode occurs and the procedure to prevent future excess emissions from the cupola stack.
2. Comply with all compliance plans approved by the Department;
3. In the future, maintain and operate all equipment at all times in a manner consistent with minimizing emissions, in compliance with 567 I.A.C. 24.2(1);
4. In the future, make timely oral and written reports of excess emissions, in compliance with 567 I.A.C. 24.1(2) and (3);
5. In the future, comply with all air quality construction permit conditions; and
6. Pay a penalty of \$10,000.00, subject to the appeal rights stated in Part VI of this Order.

V. PENALTY

1. Pursuant to the provisions of Iowa Code section 455B.109 and 567 IAC chapter 10, which authorize the Director to assess administrative penalties, a penalty of \$10,000.00 is assessed effective 30 days from receipt of this order by Griffin, unless this order is appealed within that time, as provided in Part VI of this order. The penalty shall be paid within 60 days of receipt of this order, unless a timely appeal is filed. The administrative penalty is determined as follows:

2. Iowa Code section 455B.146 authorizes the assessment of civil penalties of up to \$10,000.00 per day for violations of the type cited in this order. Iowa Code section

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455B.109 authorizes the assessment of administrative penalties up to \$10,000.00 for violations of chapter 455B or rules, permits, or orders adopted or issued under this chapter. 567 IAC chapter 10 was adopted to implement Iowa Code section 455B.109. Pursuant to 567 IAC section 10.2, it has been determined that the most equitable and efficient means of redressing and abating the violations at this time is through the issuance of an administrative order with penalty.

Economic Benefit – Griffin Pipe has operated without possible restrictions and additional control equipment on five separate emission points. First, Griffin Pipe failed to timely stack test these emission points. Once stack testing occurred, each emission point failed to comply with permitted emission limits. The savings to Griffin Pipe is estimated to be around \$500.00, and for these reasons, that amount is assessed for this factor.

Gravity of the Violation – When emissions from the aforementioned units exceed the permitted limits, there is a potential threat to the public health and the environment. Some of the test results demonstrated that the actual emissions were above the permitted limits. Not operating equipment in a manner consistent with minimizing emissions can have a negative impact on the ambient air quality. Griffin Pipe admitted that videotaped excess emissions from Emission Point 1 were caused by operator error during the burn down operation of the cupola system. There were numerous complaints prior to the videotapes being made, and it is unknown how long Griffin Pipe operated the cupola stack out of compliance. For these reasons, \$4,250.00 is assessed for this factor.

Culpability – Griffin Pipe failed to timely stack test five emission points. Once stack testing occurred, each emission point failed to comply with permitted emission limits. For these reasons, \$4,250.00 is assessed for this factor.

Aggravating Factors – Griffin Pipe has consistently been in violation of Iowa's air quality rules since November 1998. Therefore, the penalty is increased by \$1,000.00.

VI. WAIVER OF APPEAL RIGHTS

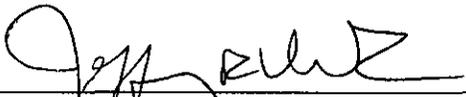
This administrative consent order is entered into knowingly by and with the consent of Griffin Pipe Products Company. For that reason, Griffin Pipe Products Company waives its right to appeal this order or any part thereof.

VII. NONCOMPLIANCE

Failure to comply with this order may result in the imposition of further administrative penalties or referral to the Attorney General to obtain injunctive relief and

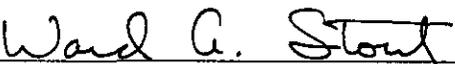
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civil penalties pursuant to Iowa Code section 455B.146. The Department reserves the right to bring enforcement action or to request that the Attorney General initiate legal action based on any subsequent violations if the order is violated, including failure to timely pay any penalty.



JEFFREY R. VONK, DIRECTOR
Iowa Department of Natural Resources

Dated this 20 day of
August, 2003.



for GRIFFIN PIPE PRODUCTS COMPANY

Dated this 25th day of
July, 2003.

RECEIVED

JUL 28 2003