

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

**Name of Permitted Facility:** MidAmerican Energy Company  
George Neal North  
**Facility Location:** 1151 260th Street  
Sergeant Bluff, Iowa 51054

**Air Quality Operating Permit Number:** 97-TV-002R1  
**Expiration Date:** January 12, 2011

**EIQ Number:** 92-2761  
**Facility File Number:** 97-04-010

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**Responsible Official**

**Mr. Steven J. Brewer**  
Vice President Supply  
7215 Navajo Street  
Council Bluffs, Iowa 51501  
(712) 366-5303

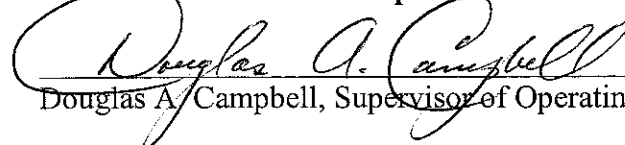
**Permit Contact Person for the Facility**

**Mr. David L. Dooley**  
Supervising Chemist  
P.O. Box 778  
Sioux City, Iowa 51102  
(712) 277-6345

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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 Operating Permits Section

*1/13/06*  
\_\_\_\_\_  
Date

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## Abbreviations

acfm.....	actual cubic feet per minute
BIF .....	boilers and industrial furnaces
CFR.....	Code of Federal Regulation
CE .....	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU .....	emission unit
gr./dscf .....	grains per dry standard cubic foot
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 <sub>2</sub> .....	sulfur dioxide
NO <sub>x</sub> .....	nitrogen oxides
VOC .....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: MidAmerican Energy Company George Neal North

Permit Number: 97-TV-002R1

Facility Description: Electric Utility (SIC 4911)

## Equipment List

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>IDNR Construction Permit Number</b>
001	001	Neal 1 Boiler	71-A-56-S1
002	002	Neal 2 Boiler	95-A-202-S1
003	003	Neal 3 Boiler	95-A-313-S3
004	004a	Tower 2A Coal Pile Bulldozing (Fugitive)	
004	004b	Tower 2A Coal Pile Open Storage (Fugitive)	
005	005a	Tower 2 Coal Pile Bulldozing (Fugitive)	
005	005b	Tower 2 Coal Pile Open Storage (Fugitive)	
006	006	2 Pit Coal Conveying	90-A-003-S2
007	007	3 Pit Coal Conveying	90-A-004-S2
007A	007A	3A Pit Coal Conveying	90-A-004-S2
008	008	11 Pit Coal Conveying	90-A-007-S2
009A	009A	Turning Tower Coal Conveying (Fugitive)	90-A-006-S1
009B	009B	Unit 3 Silo Fill Cascade/Drag (Fugitive)	90-A-006-S1
009C	009C	Unit 3 Silos	90-A-006-S1
010	010	Crusher House Coal Conveying	90-A-005-S1
011	011	Tripper Floor Coal Conveying	93-A-247-S2
012	012	Neal 2 Flyash Truck Loading (Fugitive)	
013	013	Neal 3 Flyash Silo Truck Loading (Fugitive)	
014	014	Emergency Fire Pump (225 BHP)	
015	015	2 Pit Coal Unloading (Fugitive)	04-A-893
017	017	Dry Ash Haul Road (Fugitive)	
018	018A	Dry Ash Storage Pile Grading (Fugitive)	
018	018B	Dry Ash Storage Pile Topsoil Unloading (Fugitive)	
018	018C	Dry Ash Storage Pile Wind Erosion (Fugitive)	
020	020	Neal 1 Glycol Storage Tank (3000 gallon)	
021	021	Neal 2 Glycol Storage Tank (3200 gallon)	
022	022	Neal 3 Glycol Storage Tank (430 gallon total capacity )	
023	023	Glycol Storage Tank (1,000 gallon) Breathing Loss Coal Handling Bldg.	
026	026	Emergency Stackout Coal Unloading (Fugitive)	
028	028	11 Pit Coal Unloading (Fugitive)	
035	035	Neal 2 Flyash Silo Loading (vent 1)	90-A-184
036	036	Neal 2 Flyash Silo Loading (vent 2)	90-A-185

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>IDNR Construction Permit Number</b>
037	037	Neal 3 Flyash Bin Loading (vent 1)	90-A-186
038	038	Neal 3 Flyash Silo Bin Loading (vent 2)	90-A-187
060	060	Coal Conveyor Bradford Breaker	04-A-894
062	062	Coal Conveyor Vibrating Screen	04-A-895
064	064	Tower 2 Stackout (Fugitive)	
065	065	Tower 2a Stackout (Fugitive)	
066	066	2-2A Coal Conveying	04-A-896

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### Insignificant Activities Equipment List

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<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
016	Solvent Parts Cleaning
024	Unleaded Gasoline AST (1000 gallon)
029	Unit 3 Fuel Oil AST (300,000 gallon)
030	Diesel AST (1,000 gallon)
031	Coalyard Diesel AST (1,000 gallon)
034	CUP Heating Boiler Natural Gas
040	Unit 1 Turbine Lube Oil Main Tank (4,200 gallon)
041	Unit 2 Turbine Lube Oil Main Tank (4,800 gallon)
042	Units 1 & 2 Turbine Lube Oil Batch Tank (5,900 gallon)
043	Units 1 & 2 Turbine Lube Oil Clean Tank (1,150 gallon)
044	Unit 3 Turbine Lube Oil Main Tank (13,300 gallon)
045	Units 3 Turbine Lube Oil Batch Tank (12,250 gallon)
046	Unit 2 Turbine Lube Oil Condition Tank (1,850 gallon)
047	Unit 3 Turbine Lube Oil Condition Tank (1,850 gallon)
048	Waste Oil Tank (500 gallon)
049	Waste Oil Tank (1,000 gallon)
052	Cat Shed Power Washer
053	Unit 3 Lime Feeder
054	Units 2 & 3 Mill Gearboxes Oil Tank (4,000 gallon)
056	Sand Blaster
057	Welding Equipment
067	Unit 1 Portable Generator 1 (166 BHP)
068	Unit 1 Portable Generator 2 (166 BHP)
070	Fire Pump House Space Heater
071	Fire Pump House Space Heater
072	Warehouse 606 Space Heater
073	Contractor Shack Space Heater
074	Contractor Shack Space Heater
075	Contractor Shack Space Heater

<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
076	Contractor Shack Space Heater
077	Contractor Shack Space Heater
078	N3 Fly Ash Silo Space Heater
079	N2 Fly Ash Silo Space Heater
080	Laundry Room Dryer 1
081	Laundry Room Dryer 2
082	Locker Room Boiler 1
083	Locker Room Boiler 2
084	Tinner Shack Space Heater
085	Training Center Space Heater
086	Training Center Space Heater
087	N3 Intake Space Heater 1
088	N3 Intake Space Heater 2
089	N3 Intake Space Heater 3
090	N3 Intake Space Heater 4
091	Vacuum Lift House Space Heater
092	Vacuum Lift House Space Heater
093	N1 & N2 Intake Space Heater
094	N1 & N2 Intake Space Heater
095	N1 & N2 Intake Space Heater
096	N1 & N2 Intake Space Heater
097	Cat Shed Space Heater 1
098	Cat Shed Space Heater 2
099	Oil/Water Separator
100	Oil/Water Separator
101	Vibrating Screen Reject
102	Bradford Breaker Rejector

## II. Plant-Wide Conditions

Facility Name: MidAmerican Energy Company George Neal North  
Permit Number: 97-TV-002R1

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

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### Permit Duration

The term of this permit is: 5 years  
Commencing on: January 13, 2006  
Ending on: January 12, 2011

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

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### 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 (SO<sub>2</sub>): 500 parts per million by volume  
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)<sup>1</sup>:

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)

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<sup>1</sup> 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 Matter<sup>2</sup>:

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"

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### **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, George Neal North 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, George Neal North shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

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

### III. Emission Point-Specific Conditions

Facility Name: MidAmerican Energy Company, George Neal North  
Permit Number: 97-TV-002R1

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#### **Emission Point ID Number: 001**

##### Associated Equipment

Associated Emission Unit ID Number: 001  
Emissions Control Equipment ID Number: CE001  
Emissions Control Equipment Description: Electrostatic Precipitator  
Continuous Emissions Monitors ID Numbers: ME001A (SO<sub>2</sub>), ME001B (NO<sub>x</sub>), ME001C (Diluent CO<sub>2</sub>), ME001D (Flow) and ME001E (Opacity)

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Emission Unit vented through this Emission Point: 001  
Emission Unit Description: Neal 1 Boiler (Cyclone boiler)  
Raw Material/Fuel: Coal (Auxiliary Fuel: natural gas, used oil, used ethylene glycol, and small quantity hazardous waste per EPA BIF notification IAD000678045)  
Rated Capacity: 1,363 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 Limits: 40%

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

Iowa DNR Construction Permit 71-A-056-S1

Pollutant: Particulate Matter

Emission Limits: 0.5 lb/MMBtu Only boiler in operation

When multiple boilers are in operation refer to limits in the multiple firing section on page 27.

Authority for Requirement: 567 IAC 23.3(2)"b"(5) (Iowa - State Implementation Plan (SIP))

Iowa DNR Construction Permit 71-A-056-S1

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

Emission Limits: 1.2 lb/MMBtu replicated maximum 3-hour average, 38,600 lb/day expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 71-A-056-S1

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

Emission Limits: Sulfur Dioxide Phase II Allowances

Authority for Requirement: 567 IAC 22.108(7) (Attached Phase II Permit)

### **Operational Limits & Requirements**

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

#### **Acid Rain Requirements:**

The facility is considered an affected source under 40 CFR 72, 73, 75, 76, 77, and 78 definitions as this emission unit is subject to the acid rain emission reduction requirements or the acid rain emission limitations, as adopted by the Department by reference (See 567 IAC 22.120 – 567 IAC 22.148).

Authority for Requirement: Iowa DNR Construction Permit 71-A-056-S1

#### **Process throughput: Used Oil and Used Ethylene Glycol Requirements**

Combustion of used oil and used ethylene glycol in this emission unit is limited to that which is generated on-site.

#### **Work practice standards:**

The control equipment shall be inspected and maintained according to manufacturer's specifications.

SO<sub>2</sub>, NO<sub>x</sub> and opacity continuous operating monitors (CEMs) are required. These shall be operated, calibrated, and recorded according to the specifications in 40 CFR Part 75.

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

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 71-A-056-S1

### **Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 250

Stack Opening, (feet, dia.): 9.42

Exhaust Flow Rate (acfm): 539,430

Exhaust Temperature (°F): 320

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permit 71-A-056-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.*

### **Stack Testing:**

Pollutant - Particulate Matter

1st Stack Test to be Completed by – [January 12, 2007]

2nd Stack Test to be Completed between - [July 12, 2008 and July 12, 2009]

Test Method - Iowa Method 5

Authority for Requirement - 567 IAC 22.108(3)

### **Continuous Emissions Monitoring:**

Pollutant - Opacity

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 10/93

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.1(1) and 567 IAC 25.2

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

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 10/93

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.2

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

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 10/93

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.2

### **Other Parameters**

Pollutant - Other - Carbon Dioxide (CO<sub>2</sub>)

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 10/93

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.2

Pollutant - Other - Flow

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 10/93

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75  
Authority for Requirement - 567 IAC 25.2

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

**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)

**Compliance Assurance Monitoring Plan  
Electrostatic Precipitator for PM Control**

I. Background

A. Emissions Unit:

Description: Neal 1 Boiler, Cyclone boiler  
Identification: EU 001  
Facility: MidAmerican Energy Company, George Neal North

B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: Permit 71-A-056-S1  
Particulate emission limit: 0.5 lb/MMBtu PM  
Opacity emission limit: 40%  
Current Monitoring requirements: Stack Testing  
Continuous opacity monitoring system (COMS)  
Audible Precipitator Malfunction Alarm

C. Control Technology: Electrostatic Precipitator

## II. Monitoring Approach

1. Indicator  Measurement Approach	Opacity of ESP exhaust	Audible Precipitator Malfunction Alarm
	COMS in ESP exhaust	The audible alarm will continuously monitor T-R set failure and rapper control malfunction, combined with daily inspections of the ESP electro-mechanical operation as the monitoring method.
2. Indicator Range	When the opacity exceeds 40% over any 6-minute average, corrective action will be implemented within 8 hours plus the period of time until generating capacity is available to meet consumer demand. An exceedance of the 40% opacity limit is considered a violation, and shall be reported as required in General Condition G14.	The precipitator malfunction alarm will continuously monitor T-R set failure and rapper control malfunction. Corrective action measures will be implemented on the occurrence of a precipitator malfunction alarm. The appropriate measures for remediation will be implemented within 8 hours plus the period of time until generating capacity is available to meet consumer demand.
3. Performance Criteria A. Data Representativeness  B. Verification of Operational Status  C. QA/QC Practices/Criteria  D. Monitoring Frequency	Install the COMS at a representative location in the ESP exhaust per 40 CFR 60, Appendix B, Performance Specification 1 (PS-1).	Rapper system operation, T-R set operation and ash removal system operation are indicators of the proper electro-mechanical operation of the electrostatic precipitator. An audible alarm will continuously monitor T-R set failure and rapper control health. Daily inspection of the rapper system operation, T-R set and ash removal system provides additional assurance of proper electro-mechanical operation of the electrostatic precipitator.
	Results of initial COMS performance evaluation conducted per PS-1 (October, 1993).	Results of equipment verification tests conducted to calibrate the audible alarm.
	Install and evaluate the COMS per PS-1. The continuous opacity monitor will be automatically calibrated for zero and span adjustments daily.	All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.
	Monitor the opacity of the ESP exhaust continuously (every 10 seconds).	An audible alarm will continuously monitor T-R set failure and rapper control malfunction. Daily: <ul style="list-style-type: none"> <li>• Inspection of rapper operation.</li> <li>• Inspection of T-R set operation including power usage level.</li> <li>• Inspection of ash removal system</li> </ul>

		<p>operation.</p> <p>Each Major Scheduled Unit Outage Lasting Four or More Weeks:</p> <ul style="list-style-type: none"> <li>• Check and correct plate electrode alignment.</li> <li>• Inspect for collection surface fouling.</li> <li>• Inspect T-R set mechanical condition.</li> <li>• Inspect internal structural components.</li> </ul>
E. Data Collection Procedures	Set up the data acquisition system (DAS) to retain all 6-minute and hourly average opacity data.	Maintain opacity reports, supporting data, all inspection records, and any action resulting from the inspection for 5 years and available upon request.
F. Averaging period	Use the 10-second opacity data to calculate 6-minute averages. Use the 6-minute averages to calculate the hourly block average opacity.	None.

## **Emission Point ID Number: 002**

### Associated Equipment

Associated Emission Unit ID Number: 002

Emissions Control Equipment ID Number: CE002

Emissions Control Equipment Description: Electrostatic Precipitator

Emissions Control Equipment ID Number: CE019

Emissions Control Equipment Description: Low-NO<sub>x</sub> Burners & Overfire Air

Continuous Emissions Monitors ID Numbers: ME002A (SO<sub>2</sub>), ME002B (NO<sub>x</sub>), ME002C (Diluent CO<sub>2</sub>), ME002D (Flow) and ME002E (Opacity)

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Emission Unit vented through this Emission Point: 002

Emission Unit Description: Neal 2 Boiler (Pulverized coal, wall fired, dry bottom boiler)

Raw Material/Fuel: Coal (Auxiliary Fuel: natural gas, used oil, used ethylene glycol, and small quantity hazardous waste per EPA BIF notification IAD000678045)

Rated Capacity: 3,081 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 Limits: 40%

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

Iowa DNR Construction Permit 95-A-202-S1

Pollutant: Particulate Matter

Emission Limits: 0.30 lb/MMBtu Only boiler in operation

When multiple boilers are in operation refer to limits in the multiple firing section on page 27.

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

Iowa DNR Construction Permit 95-A-202-S1

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

Emission Limits: 1.2 lb/MMBtu replicated maximum 3-hour average, 87,253 lb/day expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 95-A-202-S1

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

Emission Limits: Sulfur Dioxide Allowances

Authority for Requirement: 567 IAC 22.108(7) (Attached Phase II Permit)

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

Emission Limits: See attached Phase II Permit

Authority for Requirement: 567 IAC 22.125(4) (Attached Phase II Permit)  
40 CFR 76.5(a)(2)

### **Operational Limits & Requirements**

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

Process throughput: Used Oil and Used Ethylene Glycol Requirements

Combustion of used oil and used ethylene glycol in this emission unit is limited to that which is generated on-site.

Work practice standards:

The control equipment shall be inspected and maintained according to manufacturer's specifications.

SO<sub>2</sub>, NO<sub>x</sub> and opacity continuous operating monitors (CEMs) are required. These shall be operated, calibrated, and recorded according to the specifications in 40 CFR Part 75.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: 567 IAC 22.108(3)

Iowa DNR Construction Permit 95-A-202-S1

### **Emission Point Characteristics**

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

Stack Height (feet): 300

Stack Opening (feet): 15.25

Stack Exhaust Flow Rate (acfm): 1,140,000

Exhaust Temperature (°F): 290

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-202-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.*

### **Stack Testing:**

Pollutant - Particulate Matter

1st Stack Test to be Completed by – [January 12, 2007]

2nd Stack Test to be Completed between - [July 12, 2008 and July 12, 2009]

Test Method - Iowa Method 5

Authority for Requirement - 567 IAC 22.108(3)

### **Continuous Emissions Monitoring:**

Pollutant - Opacity

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 7/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.1(1) and 567 IAC 25.2

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

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 7/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.2

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

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 7/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.2

### **Other Parameters**

Pollutant - Other - Carbon Dioxide (CO<sub>2</sub>)

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 7/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.2

Pollutant - Other - Flow

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 7/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75  
Authority for Requirement - 567 IAC 25.2

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

**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)

**Compliance Assurance Monitoring Plan  
Electrostatic Precipitator for PM Control**

I. Background

A. Emissions Unit:

Description: Neal 2 Boiler, Pulverized coal, wall fired, dry bottom boiler  
Identification: EU 002  
Facility: MidAmerican Energy Company, George Neal North

B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: Permit 95-A-202-S1  
Particulate emission limit: 0.3 lb/MMBtu PM  
Opacity emission limit: 40%  
Current Monitoring requirements: Stack Testing  
Continuous opacity monitoring system (COMS)  
Audible Precipitator Malfunction Alarm

C. Control Technology: Electrostatic Precipitator

## II. Monitoring Approach

2. Indicator  Measurement Approach	Opacity of ESP exhaust	Audible Precipitator Malfunction Alarm
	COMS in ESP exhaust	The audible alarm will continuously monitor T-R set failure and rapper control malfunction, combined with daily inspections of the ESP electro-mechanical operation as the monitoring method.
2. Indicator Range	When the opacity exceeds 40% over any 6-minute average, corrective action will be implemented within 8 hours plus the period of time until generating capacity is available to meet consumer demand. An exceedance of the 40% opacity limit is considered a violation, and shall be reported as required in General Condition G14.	The precipitator malfunction alarm will continuously monitor T-R set failure and rapper control malfunction. Corrective action measures will be implemented on the occurrence of a precipitator malfunction alarm. The appropriate measures for remediation will be implemented within 8 hours plus the period of time until generating capacity is available to meet consumer demand.
3. Performance Criteria A. Data Representativeness  B. Verification of Operational Status  C. QA/QC Practices/Criteria  D. Monitoring Frequency	Install the COMS at a representative location in the ESP exhaust per 40 CFR 60, Appendix B, Performance Specification 1 (PS-1).	Rapper system operation, T-R set operation and ash removal system operation are indicators of the proper electro-mechanical operation of the electrostatic precipitator. An audible alarm will continuously monitor T-R set failure and rapper control health. Daily inspection of the rapper system operation, T-R set and ash removal system provides additional assurance of proper electro-mechanical operation of the electrostatic precipitator.
	Results of initial COMS performance evaluation conducted per PS-1 (July, 1994).	Results of equipment verification tests conducted to calibrate the audible alarm.
	Install and evaluate the COMS per PS-1. The continuous opacity monitor will be automatically calibrated for zero and span adjustments daily.	All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.
	Monitor the opacity of the ESP exhaust continuously (every 10 seconds).	An audible alarm will continuously monitor T-R set failure and rapper control malfunction. Daily: <ul style="list-style-type: none"> <li>• Inspection of rapper operation.</li> <li>• Inspection of T-R set operation including power usage level.</li> <li>• Inspection of ash removal system</li> </ul>

		<p>operation.</p> <p>Each Major Scheduled Unit Outage Lasting Four or More Weeks:</p> <ul style="list-style-type: none"> <li>• Check and correct plate electrode alignment.</li> <li>• Inspect for collection surface fouling.</li> <li>• Inspect T-R set mechanical condition.</li> <li>• Inspect internal structural components.</li> </ul>
E. Data Collection Procedures	Set up the data acquisition system (DAS) to retain all 6-minute and hourly average opacity data.	Maintain opacity reports, supporting data, all inspection records, and any action resulting from the inspection for 5 years and available upon request.
F. Averaging period	Use the 10-second opacity data to calculate 6-minute averages. Use the 6-minute averages to calculate the hourly block average opacity.	None.

## **Emission Point ID Number: 003**

### Associated Equipment

Associated Emission Unit ID Number: 003

Emissions Control Equipment ID Number: CE003

Emissions Control Equipment Description: Electrostatic Precipitator

Continuous Emissions Monitors ID Numbers: ME003A (SO<sub>2</sub>), ME03B (NO<sub>x</sub>), ME003C (Diluent CO<sub>2</sub>), ME003D (Flow), ME003E (Opacity) and ME003F (CO)

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Emission Unit vented through this Emission Point: 003

Emission Unit Description: Neal 3 Boiler (Pulverized coal, wall fired, dry bottom boiler)

Raw Material/Fuel: Coal (Auxiliary Fuel: #2 fuel oil, natural gas, used oil, used ethylene glycol, and small quantity hazardous waste per EPA BIF notification IAD000678045)

Rated Capacity: 5,021 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 Limits: 40%

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

Iowa DNR Construction Permit 95-A-313-S3

Pollutant: Particulate Matter

Emission Limits: 0.17 lb/MMBtu Only boiler in operation

When multiple boilers are in operation refer to limits in the multiple firing section on page 27.

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

Iowa DNR Construction Permit 95-A-313-S3

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

Emission Limits: 1.2 lb/MMBtu replicated maximum 3-hour average, 142,194 lb/day expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 95-A-313-S3

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

Emission Limits: Sulfur Dioxide Allowances Effective on January 1, 2000

Authority for Requirement: 567 IAC 22.108(7) (Attached Phase II Permit)

Pollutant: Nitrogen Oxide (NO<sub>x</sub>)  
Emission Limits: See attached Phase II Permit  
Authority for Requirement: 567 IAC 22.125(4) (Attached Phase II Permit)  
40 CFR 76.5(a)(2)

Pollutant: Nitrogen Oxide (NO<sub>x</sub>)  
Emission Limits: 0.30 lb/MMBtu is a 30-day rolling average, 5498.0 Tons/Yr is a 12-month rolling average  
Authority for Requirement: Iowa DNR Construction Permit 95-A-313-S3

Pollutant: Carbon Monoxide (CO)  
Emission Limits: 1.26 lb/MMBtu is a 1-hour average; 9236.6 Tons/Yr is a 12-month rolling average  
Authority for Requirement: Iowa DNR Construction Permit 95-A-313-S3

### **Operational Limits & Requirements**

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

Process throughput:  
NO<sub>x</sub> emissions shall not exceed 5498.0 tons per twelve-month rolling period.  
CO emissions shall not exceed 9236.6 tons per twelve-month rolling period.

Work practice standards:  
SO<sub>2</sub>, NO<sub>x</sub>, CO and Opacity continuous operating monitors (CEMS) are required.  
The SO<sub>2</sub>, NO<sub>x</sub> and Opacity CEMS shall be operated, calibrated, and recorded according to the specifications in 40 CFR Part 75.  
Compliance with the CO emission limit of this permit shall be continuously demonstrated by the owner/operator through the use of a CEMS. The CEMS shall be installed, calibrated, maintained, and operated for measuring carbon monoxide emissions in units of the standards discharged to the atmosphere from this unit and the output of the system shall be recorded. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 3 (PS3), Performance Specification 4 (PS4) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60 Appendix F (Quality Assurance/Quality Control) shall apply. If PS3 is equivalent to 40 CFR 75 Appendix A, then 40 CFR 75 Appendix A may be used in place of PS3. .

Reporting & Record keeping:  
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

The owner or operator shall keep records of control equipment inspections and maintenance.  
Record NO<sub>x</sub> emissions per twelve-month rolling period.  
Record CO emissions per twelve-month rolling period.  
Authority for Requirement: 567 IAC 22.108(3)

The control equipment shall be inspected and maintained according to the manufacturer's specifications.

NO<sub>x</sub> emissions shall not exceed 5498.0 tons per twelve-month rolling period.

CO emissions shall not exceed 9236.6 tons per twelve-month rolling period.

Authority for Requirement: 567 IAC 22.108(3)

Iowa DNR Construction Permit 95-A-313-S3

### **Emission Point Characteristics**

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

Stack Height (feet): 400

Stack Opening (feet): 20

Stack Exhaust Flow Rate (acfm): 2,029,000

Exhaust Temperature (°F): 350

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-313-S3

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.*

#### **Stack Testing:**

Pollutant - Particulate Matter

1st Stack Test to be Completed by – [January 12, 2007]

2nd Stack Test to be Completed between - [July 12, 2008 and July 12, 2009]

Test Method - Iowa Method 5

Authority for Requirement - 567 IAC 22.108(3)

#### **Continuous Emissions Monitoring:**

Pollutant - Opacity

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 7/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75

Authority for Requirement - 567 IAC 25.1(1) and 567 IAC 25.2

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

Operational Specifications - 40 CFR Part 75

Initial System Calibration/Quality Assurance - 7/94

Ongoing System Calibration/Quality Assurance - 40 CFR Part 75

Reporting & Record keeping - 40 CFR Part 75  
Authority for Requirement - 567 IAC 25.2

Pollutant - Nitrogen Oxides (NO<sub>x</sub>)  
Operational Specifications - 40 CFR Part 75  
Initial System Calibration/Quality Assurance - 7/94  
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75  
Reporting & Record keeping - 40 CFR Part 75  
Authority for Requirement - 567 IAC 25.2

Pollutant - Carbon Monoxide (CO)  
Operational Specifications - 40 CFR Part 75  
Initial System Calibration/Quality Assurance – TBD Month/Year  
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75  
Reporting & Record keeping - 40 CFR Part 75  
Authority for Requirement - 567 IAC 25.2

**Other Parameters**

Pollutant - Other - Carbon Dioxide (CO<sub>2</sub>)  
Operational Specifications - 40 CFR Part 75  
Initial System Calibration/Quality Assurance - 7/94  
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75  
Reporting & Record keeping - 40 CFR Part 75  
Authority for Requirement - 567 IAC 25.2

Pollutant - Other - Flow  
Operational Specifications - 40 CFR Part 75  
Initial System Calibration/Quality Assurance - 7/94  
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75  
Reporting & Record keeping - 40 CFR Part 75  
Authority for Requirement - 567 IAC 25.2

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

**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)

**Compliance Assurance Monitoring Plan  
Electrostatic Precipitator for PM Control**

**I. Background**

**A. Emissions Unit:**

Description: Neal 3 Boiler, Pulverized coal, wall fired, dry bottom boiler

Identification: EU 003

Facility: MidAmerican Energy Company, George Neal North

**B. Applicable Regulation, Emission Limit, and Monitoring Requirements:**

Regulation No.: Permit 95-A-313-S3

Particulate emission limit: 0.17 lb/MMBtu PM

Opacity emission limit: 40%

Current Monitoring requirements: Stack Testing  
Continuous opacity monitoring system (COMS)  
Audible Precipitator Malfunction Alarm

**C. Control Technology: Electrostatic Precipitator**

**II. Monitoring Approach**

3. Indicator  Measurement Approach	Opacity of ESP exhaust	Audible Precipitator Malfunction Alarm
	COMS in ESP exhaust	The audible alarm will continuously monitor T-R set failure and rapper control malfunction, combined with daily inspections of the ESP electro-mechanical operation as the monitoring method.
2. Indicator Range	When the opacity exceeds 40% over any 6-minute average, corrective action will be implemented within 8 hours plus the period of time until generating capacity is available to meet consumer demand. An exceedance of the 40% opacity limit is considered a violation, and shall be reported as required in General Condition G14.	The precipitator malfunction alarm will continuously monitor T-R set failure and rapper control malfunction. Corrective action measures will be implemented on the occurrence of a precipitator malfunction alarm. The appropriate measures for remediation will be implemented within 8 hours plus the period of time until generating capacity is available to meet consumer demand.
3. Performance Criteria A. Data Representativeness	Install the COMS at a representative location in the ESP exhaust per 40 CFR 60, Appendix B, Performance Specification 1 (PS-1).	Rapper system operation, T-R set operation and ash removal system operation are indicators of the proper electro-mechanical operation of the electrostatic precipitator. An audible alarm will continuously monitor T-R set failure and rapper control health. Daily inspection of the rapper system

		operation, T-R set and ash removal system provides additional assurance of proper electro-mechanical operation of the electrostatic precipitator.
B. Verification of Operational Status	Results of initial COMS performance evaluation conducted per PS-1 (July, 1994).	Results of equipment verification tests conducted to calibrate the audible alarm.
C. QA/QC Practices/Criteria	Install and evaluate the COMS per PS-1. The continuous opacity monitor will be automatically calibrated for zero and span adjustments daily.	All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.
D. Monitoring Frequency	Monitor the opacity of the ESP exhaust continuously (every 10 seconds).	An audible alarm will continuously monitor T-R set failure and rapper control malfunction. Daily: <ul style="list-style-type: none"> <li>• Inspection of rapper operation.</li> <li>• Inspection of T-R set operation including power usage level.</li> <li>• Inspection of ash removal system operation.</li> </ul> Each Major Scheduled Unit Outage Lasting Four or More Weeks: <ul style="list-style-type: none"> <li>• Check and correct plate electrode alignment.</li> <li>• Inspect for collection surface fouling.</li> <li>• Inspect T-R set mechanical condition.</li> <li>• Inspect internal structural components.</li> </ul>
E. Data Collection Procedures	Set up the data acquisition system (DAS) to retain all 6-minute and hourly average opacity data.	Maintain opacity reports, supporting data, all inspection records, and any action resulting from the inspection for 5 years and available upon request.
F. Averaging period	Use the 10-second opacity data to calculate 6-minute averages. Use the 6-minute averages to calculate the hourly block average opacity.	None.

**Emission Point ID Number: Multiple Firing Scenarios for 001, 002, & 003  
Based on ASME Standard APS-1, Second Edition**

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Emission Unit vented through this Emission Point: 001  
Emission Unit Description: Neal 1 Boiler (Cyclone boiler)  
Raw Material/Fuel: Coal  
Rated Capacity: 1,363 MMBtu/hr

Emission Unit vented through this Emission Point: 002  
Emission Unit Description: Neal 2 Boiler (Pulverized coal, wall fired, dry bottom boiler)  
Raw Material/Fuel: Coal  
Rated Capacity: 3,081 MMBtu/hr

Emission Unit vented through this Emission Point: 003  
Emission Unit Description: Neal 3 Boiler (Pulverized coal, wall fired, dry bottom boiler)  
Raw Material/Fuel: Coal  
Rated Capacity: 5,021 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: Particulate Matter

Units 001 & 002 fired - Emission Limits:	0.27 lb/MMBtu (Total heat input)
Units 001 & 003 fired - Emission Limits:	0.26 lb/MMbtu (Total heat input)
Units 002 & 003 fired - Emission Limits:	0.23 lb/MMbtu (Total heat input)
Units 001, 002 & 003 fired - Emission Limits:	0.17 lb/MMbtu (Total heat input)
Authority for Requirement: 567 IAC 23.3(2)"b"	

- **See individual emission point sections for other requirements.**

**Emission Point ID Number: 004**

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 004a & 004b

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Emission Unit vented through this Emission Point: 004a  
Emission Unit Description: Tower 2a Coal Pile (Fugitive) - Bulldozing  
Raw Material/Fuel: Coal  
Rated Capacity: Potential is based on 2 bulldozers operating.

Emission Unit vented through this Emission Point: 004b  
Emission Unit Description: Tower 2a Coal Pile (Fugitive) - Open Storage  
Raw Material/Fuel: Coal  
Rated Capacity: 21.5 Acres

**Applicable Requirements**

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

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

Pollutant: Fugitive Dust  
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.  
Authority for Requirement: 567 IAC 23.3(2)"c"

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 005**

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 005a 005b

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Emission Unit vented through this Emission Point: 005a  
Emission Unit Description: Tower 2 Coal Pile (Fugitive) - Bulldozing  
Raw Material/Fuel: Coal  
Rated Capacity: Potential is based on 2 bulldozers operating.

Emission Unit vented through this Emission Point: 005b  
Emission Unit Description: Tower 2 Coal Pile (Fugitive) - Open Storage  
Raw Material/Fuel: Coal

**Applicable Requirements**

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

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

Pollutant: Fugitive Dust  
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.  
Authority for Requirement: 567 IAC 23.3(2)"c"

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 006**

### Associated Equipment

Associated Emission Unit ID Number: 006

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Emission Unit vented through this Emission Point: 006

Emission Unit Description: 2 Pit - Coal Conveying

Raw Material/Fuel: Coal

Rated Capacity: 3,200 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 Limits: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"

Iowa DNR Construction Permit 90-A-003-S2

Pollutant: Particulate Matter

Emission Limits: 0.02 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 90-A-003-S2

Pollutant: PM-10

Emission Limit(s): 3.09 lb/hr expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 90-A-003-S2

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

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

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

**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: 007**

Associated Equipment

Associated Emission Unit ID Number: 007

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Emission Unit vented through this Emission Point: 007

Emission Unit Description: 3 Pit - Coal Conveying

Raw Material/Fuel: Coal

Rated Capacity: 1,000 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 Limits: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"

Iowa DNR Construction Permit 90-A-004-S2

Pollutant: Particulate Matter

Emission Limits: 0.02 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 90-A-004-S2

Pollutant: PM-10

Emission Limit(s): 3.10 lb/hr expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 90-A-004-S2

**Operational Limits & Requirements**

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

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

**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: 007A**

### Associated Equipment

Associated Emission Unit ID Number: 007A

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Emission Unit vented through this Emission Point: 007A

Emission Unit Description: 3A Pit - Coal Conveying

Raw Material/Fuel: Coal

Rated Capacity: 1,000 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 Limits: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"

Iowa DNR Construction Permit 90-A-004-S2

Pollutant: Particulate Matter

Emission Limits: 0.02 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 90-A-004-S2

Pollutant: PM-10

Emission Limit(s): 3.10 lb/hr expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 90-A-004-S2

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

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

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

**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: 008**

Associated Equipment

Associated Emission Unit ID Number: 008

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Emission Unit vented through this Emission Point: 008

Emission Unit Description: 11 Pit - Coal Conveying

Raw Material/Fuel: Coal

Rated Capacity: 1,300 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 Limits: 20%

Authority for Requirement: 567 IAC 23.3(1)"v"

Iowa DNR Construction Permit 90-A-007-S2

Pollutant: Particulate Matter

Emission Limits: 0.02 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 90-A-007-S2

Pollutant: PM-10

Emission Limit(s): 5.83 lb/hr expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 90-A-007-S2

**Operational Limits & Requirements**

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

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

**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: 009A**

Associated Equipment

Associated Emission Unit ID Number: 009A

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Emission Unit vented through this Emission Point: 009A  
Emission Unit Description: Turning Tower Coal Conveying (Fugitive)  
Raw Material/Fuel: Coal  
Rated Capacity: 1,300 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: Fugitive Dust

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

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 009B**

Associated Equipment

Associated Emission Unit ID Number: 009B

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Emission Unit vented through this Emission Point: 009B  
Emission Unit Description: Unit 3 Silo Fill Cascade/Drag (Fugitive)  
Raw Material/Fuel: Coal  
Rated Capacity: 700 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: Fugitive Dust

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

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 009C**

### Associated Equipment

Associated Emission Unit ID Number: 009C

Emissions Control Equipment ID Number: CE007

Emissions Control Equipment Description: Pulse Jet Bag Filter

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Emission Unit vented through this Emission Point: 009C

Emission Unit Description: Unit 3 Silos

Raw Material/Fuel: Coal

Rated Capacity: 1,300 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 Limits: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"

Iowa DNR Construction Permit 90-A-006-S1

Pollutant: Particulate Matter

Emission Limits: 7.68 lb/hr expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 90-A-006-S1

Pollutant: PM-10

Emission Limits: 6.20 lb/hr expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 90-A-006-S1

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

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

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is

not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

Control equipment parameters: The control equipment shall be inspected and maintained according to manufacturer's specifications.

Work practice standards: The drag conveyor shall be used only when the cascade conveyor is down for maintenance.

Reporting & Record keeping: All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 90-A-006-S1

### **Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 165

Stack Opening, (inches, dia.): 44

Exhaust Flow Rate (scfm): 44,800

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permit 90-A-006-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.*

#### **Opacity monitoring**

Visible emissions shall be observed on a daily basis to ensure no visible emissions occur during the material handling operation of the unit. If visible emissions are observed this would be an excursion not a violation, and corrective action will be taken as soon as possible, but no later

than 8 hours. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

**Stack Testing:**

Pollutant - Particulate Matter  
 Stack Test to be Completed by – [within one year]  
 Test Method - Iowa Method 5  
 Authority for Requirement - 567 IAC 22.108(3)

Pollutant – PM-10  
 Stack Test to be Completed by (date) – [within one year]  
 Test Method – 40 CFR 51, Appendix M, 201A with 202 (or approved alternative)  
 Authority for Requirement: 567 IAC 22.108(3)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**CAM Plan for EP009 Bag filter**

I. Background

A. Emissions Unit

Description: Turning Tower - Coal Conveying  
 Identification: EU 009  
 Facility: MidAmerican Energy Company, George Neal North

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 90-A-006-S1

Particulate Matter Emission Limit: 7.68 lb/hr PM, 6.20 lb/hr PM-10  
Opacity emission limit: 20%  
Current Monitoring requirements: Stack Testing, and daily visible emissions  
Alternative Monitoring requirements: In lieu of the visible emissions monitoring required below, the permittee may install and operate a bag leak detection system. If this option is chosen, the permittee shall following the monitoring approach listed under section III of this CAM plan.

C. Control Technology  
Baghouse

II. Monitoring Approach

A. Indicator

Visible emissions will be used as an indicator, along with weekly and annual performance inspections.

B. Measurement Approach

Daily:

- Visible emissions will be checked during the material handling operation of the unit.

Weekly:

- Check the cleaning sequence of the baghouse.
- Check hopper functions and performance.

Annually:

- Thoroughly inspect bags for leaks and wear.
- Inspect bag cleaning components.
- Inspect hopper unloading components.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

C. Indicator Range

An excursion is defined as the presence of visible emissions.

Excursions trigger an inspection and corrective action.

D. QIP (Quality Improvement Plan) Threshold

Five excursions in a 6-month reporting period

E. Performance Criteria

Data Representativeness: Measurements are being made at the emission point (bag filter exhaust).

Verification of operational status: Records of visible emissions readings, a log of performance, inspections, and any corrective actions will be maintained for five years.

QA/QC practices and criteria: The observer will be familiar with Reference Method 22 and follow Method 22-like procedures.

Monitoring frequency: A 6-minute Method 22-like observation is performed daily, along with weekly and annual performance inspections.

Data collection procedures: The visible emissions observation, a log of performance inspections, and any corrective actions are documented by the observer.

Averaging Period: N/A

### III. Alternative Monitoring Approach

- A. Indicator to be Monitored: Bag leak detection monitor signal.
- B. Rationale for Monitoring Approach: Bag leak detectors that operate on principles such as triboelectricity, electrostatic induction, light scattering, or light transmission, produce a signal that is proportional to the particulate loading in the baghouse outlet gas stream. When bag leaks occur, the cleaning peak height or baseline signal level will increase. Alarm levels based on increases in normal cleaning peak heights or the normal baseline signal can be set to detect filter bag leaks.
- C. Monitoring Locations: At the fabric filter outlet.
- D. Analytical Devices Required: Bag leak detector and associated instrumentation.
- E. Data Acquisition and Measurement System Operation
  - Frequency of measurement: Continuous.
  - Reporting units: Amps, volts, or percent of scale.
  - Recording process: Recorded automatically on strip chart or data acquisition system.
- F. Data Requirements
  - Historical signal data showing baseline level and cleaning peak height during normal operation or signal data concurrent with emission testing.
- G. Specific QA/QC Procedures: Calibrate, maintain, and operate instrumentation using procedures that take into account manufacture's specifications.

## **Emission Point ID Number: 010**

### Associated Equipment

Associated Emission Unit ID Number: 010

Emissions Control Equipment ID Number: CE008

Emissions Control Equipment Description: Pulse Jet Bag Filter

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Emission Unit vented through this Emission Point: 010

Emission Unit Description: Crusher House - Coal Conveying

Raw Material/Fuel: Coal

Rated Capacity: 1,200 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 Limits: 40%<sup>(1)</sup>

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

Iowa DNR Construction Permit 90-A-005-S1

<sup>(1)</sup> 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).

Pollutant: Particulate Matter

Emission Limits: 0.02 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 90-A-005-S1

Pollutant: PM-10

Emission Limits: 5.16 lb/hr expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 90-A-005-S1

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

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

Control equipment parameters: The control equipment shall be inspected and maintained according to manufacturer's specifications.

Reporting & Record keeping: The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 90-A-005-S1

**Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 14

Stack Opening, (inches, dia.): 42

Exhaust Flow Rate (scfm): 30,100

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permit 90-A-005-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.*

**Stack Testing:**

Pollutant - Particulate Matter

Stack Test to be Completed by – [within one year]

Test Method - Iowa Method 5

Authority for Requirement - 567 IAC 22.108(3)

Pollutant – PM-10

Stack Test to be Completed by (date) – [within one year]

Test Method – 40 CFR 51, Appendix M, 201A with 202 (or approved alternative)

Authority for Requirement: 567 IAC 22.108(3)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## CAM Plan for EP010 Bag filter

### I. Background

#### A. Emissions Unit

Description: Crusher House - Coal Conveying  
Identification: EU 010  
Facility: MidAmerican Energy Company, George Neal North

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 90-A-005-S1  
Particulate Matter Emission Limit: 0.02 gr/dscf PM, 5.16 lb/hr PM-10  
Opacity emission limit: 40%  
Current Monitoring requirements: Stack Testing, and daily visible emissions  
Alternative Monitoring requirements: In lieu of the visible emissions monitoring required below, the permittee may install and operate a bag leak detection system. If this option is chosen, the permittee shall following the monitoring approach listed under section III of this CAM plan.

#### C. Control Technology

Baghouse

### II. Monitoring Approach

#### A. Indicator

Visible emissions will be used as an indicator, along with weekly and annual performance inspections.

#### B. Measurement Approach

##### Daily:

- Visible emissions will be checked during the material handling operation of the unit.

##### Weekly:

- Check the cleaning sequence of the baghouse.
- Check hopper functions and performance.

##### Annually:

- Thoroughly inspect bags for leaks and wear.
- Inspect bag cleaning components.
- Inspect hopper unloading components.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

#### C. Indicator Range

An excursion is defined as the presence of visible emissions.  
Excursions trigger an inspection and corrective action.

#### D. QIP (Quality Improvement Plan) Threshold

Five excursions in a 6-month reporting period

E. Performance Criteria

Data Representativeness: Measurements are being made at the emission point (bag filter exhaust).

Verification of operational status: Records of visible emissions readings, a log of performance, inspections, and any corrective actions will be maintained for five years.

QA/QC practices and criteria: The observer will be familiar with Reference Method 22 and follow Method 22-like procedures.

Monitoring frequency: A 6-minute Method 22-like observation is performed daily, along with weekly and annual performance inspections.

Data collection procedures: The visible emissions observation, a log of performance inspections, and any corrective actions are documented by the observer.

Averaging Period: N/A

III. Alternative Monitoring Approach

H. Indicator to be Monitored: Bag leak detection monitor signal.

I. Rationale for Monitoring Approach: Bag leak detectors that operate on principles such as triboelectricity, electrostatic induction, light scattering, or light transmission, produce a signal that is proportional to the particulate loading in the baghouse outlet gas stream. When bag leaks occur, the cleaning peak height or baseline signal level will increase. Alarm levels based on increases in normal cleaning peak heights or the normal baseline signal can be set to detect filter bag leaks.

J. Monitoring Locations: At the fabric filter outlet.

K. Analytical Devices Required: Bag leak detector and associated instrumentation.

L. Data Acquisition and Measurement System Operation

- Frequency of measurement: Continuous.
- Reporting units: Amps, volts, or percent of scale.
- Recording process: Recorded automatically on strip chart or data acquisition system.

M. Data Requirements

- Historical signal data showing baseline level and cleaning peak height during normal operation or signal data concurrent with emission testing.

N. Specific QA/QC Procedures: Calibrate, maintain, and operate instrumentation using procedures that take into account manufacture's specifications.

## **Emission Point ID Number: 011**

### Associated Equipment

Associated Emission Unit ID Number: 011

Emissions Control Equipment ID Number: CE009

Emissions Control Equipment Description: Pulse Jet Bag Filter

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Emission Unit vented through this Emission Point: 011

Emission Unit Description: Tripper Floor - Coal Conveying

Raw Material/Fuel: Coal

Rated Capacity: 500 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 Limits: 40%<sup>(1)</sup>

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

Iowa DNR Construction Permit 93-A-247-S2

<sup>(1)</sup>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).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/scf

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

Iowa DNR Construction Permit 93-A-247-S2

Pollutant: PM-10

Emission Limits: 2.65 lb/hr expressed as the average of 3 runs

Authority for Requirement: Iowa DNR Construction Permit 93-A-247-S2

#### **Emission Point Characteristics**

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

Stack Height (feet): 180.3

Stack Opening (inches): 36

Exhaust Flow Rate (scfm): 34,700

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 93-A-247-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.*

**Stack Testing:**

- Pollutant - Particulate Matter
- Stack Test to be Completed by – [within one year]
- Test Method - Iowa Method 5
- Authority for Requirement - 567 IAC 22.108(3)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**CAM Plan for EP011 Bag filter**

I. Background

A. Emissions Unit

- Description:      Tripper Floor - Coal Conveying
- Identification:    EU 011
- Facility:            MidAmerican Energy Company, George Neal North

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

- Regulation No.:                      Iowa DNR Construction Permit 93-A-247-S2
- Particulate Matter Emission Limit:    0.1 gr/dscf PM, 2.65 lb/hr PM-10
- Opacity emission limit:                40%
- Current Monitoring requirements:    Stack Testing, and daily visible emissions
- Alternative Monitoring requirements: In lieu of the visible emissions monitoring required below, the permittee may install and operate a bag leak detection system. If this option is chosen, the permittee shall following the monitoring approach listed under section III of this CAM plan.

C. Control Technology  
Baghouse

II. Monitoring Approach

A. Indicator

Visible emissions will be used as an indicator, along with weekly and annual performance inspections.

B. Measurement Approach

Daily:

- Visible emissions will be checked during the material handling operation of the unit.

Weekly:

- Check the cleaning sequence of the baghouse.
- Check hopper functions and performance.

Annually:

- Thoroughly inspect bags for leaks and wear.
- Inspect bag cleaning components.
- Inspect hopper unloading components.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

C. Indicator Range

An excursion is defined as the presence of visible emissions.  
Excursions trigger an inspection and corrective action.

D. QIP (Quality Improvement Plan) Threshold

Five excursions in a 6-month reporting period

E. Performance Criteria

Data Representativeness: Measurements are being made at the emission point (bag filer exhaust).

Verification of operational status: Records of visible emissions readings, a log of performance, inspections, and any corrective actions will be maintained for five years.

QA/QC practices and criteria: The observer will be familiar with Reference Method 22 and follow Method 22-like procedures.

Monitoring frequency: A 6-minute Method 22-like observation is performed daily, along with weekly and annual performance inspections.

Data collection procedures: The visible emissions observation, a log of performance inspections, and any corrective actions are documented by the observer.

Averaging Period: N/A

### III. Alternative Monitoring Approach

- O. Indicator to be Monitored: Bag leak detection monitor signal.
- P. Rationale for Monitoring Approach: Bag leak detectors that operate on principles such as triboelectricity, electrostatic induction, light scattering, or light transmission, produce a signal that is proportional to the particulate loading in the baghouse outlet gas stream. When bag leaks occur, the cleaning peak height or baseline signal level will increase. Alarm levels based on increases in normal cleaning peak heights or the normal baseline signal can be set to detect filter bag leaks.
- Q. Monitoring Locations: At the fabric filter outlet.
- R. Analytical Devices Required: Bag leak detector and associated instrumentation.
- S. Data Acquisition and Measurement System Operation
  - Frequency of measurement: Continuous.
  - Reporting units: Amps, volts, or percent of scale.
  - Recording process: Recorded automatically on strip chart or data acquisition system.
- T. Data Requirements
  - Historical signal data showing baseline level and cleaning peak height during normal operation or signal data concurrent with emission testing.
- U. Specific QA/QC Procedures: Calibrate, maintain, and operate instrumentation using procedures that take into account manufacture's specifications.

**Emission Point ID Number: 012**

Associated Equipment

Associated Emission Unit ID Number: 012

Emissions Control Equipment ID Number: CE010

Emissions Control Equipment Description: Telescopic Chute

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Emission Unit vented through this Emission Point: 012

Emission Unit Description: Neal 2 Flyash Truck Loading (Fugitive)

Raw Material/Fuel: Flyash

Rated Capacity: 20 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: Fugitive Dust

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

Authority for Requirement: 567 IAC 23.3(2)"c"(1)

**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: 013**

Associated Equipment

Associated Emission Unit ID Number: 013

Emissions Control Equipment ID Number: CE011

Emissions Control Equipment Description: Telescopic Chute

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Emission Unit vented through this Emission Point: 013

Emission Unit Description: Neal 3 Flyash Truck Loading (Fugitive)

Raw Material/Fuel: Flyash

Rated Capacity: 20 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: Fugitive Dust

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

Authority for Requirement: 567 IAC 23.3(2)"c"(1)

**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: 014**

Associated Equipment

Associated Emission Unit ID Numbers: 014

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Emission Unit vented through this Emission Point: 014  
Emission Unit Description: Emergency Fire Pump (225 BHP)  
Raw Material/Fuel: Natural Gas & Diesel Fuel  
Rated Capacity: 0.001 MMcf/hr/11.1 gallons/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 Limits: 40 %  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter  
Emission Limits: 0.1 gr/dscf  
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: 015**

### Associated Equipment

Associated Emission Unit ID Number: 015

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Emission Unit vented through this Emission Point: 015

Emission Unit Description: 2 Pit Coal Unloading (Fugitive)

Raw Material/Fuel: Coal

Rated Capacity: 3,200 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 Limits: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"

Iowa DNR Construction Permit 04-A-893

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/scf

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

Iowa DNR Construction Permit 04-A-893

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

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

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

**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: 017**

Associated Equipment

Associated Emission Unit ID Number: 017

Emissions Control Equipment ID Number: CE012

Emissions Control Equipment Description: Water Spray

---

Emission Unit vented through this Emission Point: 017

Emission Unit Description: Dry Ash Haul Road (Fugitive)

Raw Material/Fuel: Ash

Rated Capacity: 17.9 Vehicle Miles/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: Fugitive Dust

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

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 018**

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 018A 018B and 018C

Emissions Control Equipment ID Number: CE013 for EU 018A and EU 018B

Emissions Control Equipment Description: Water Spray

---

Emission Unit vented through this Emission Point: 018A

Emission Unit Description: Dry Ash Storage Pile - Grading (Fugitive)

Raw Material/Fuel: Ash

Rated Capacity: 2 Vehicle Miles/hr

Emission Unit vented through this Emission Point: 018B

Emission Unit Description: Dry Ash Storage Pile - Topsoil and Ash Unloading (Fugitive)

Raw Material/Fuel: Topsoil

Rated Capacity: 51 Tons/hr

Emission Unit vented through this Emission Point: 018C

Emission Unit Description: Dry Ash Storage Pile - Wind Erosion (Fugitive)

Raw Material/Fuel: Ash

Rated Capacity: 83 Acres

**Applicable Requirements**

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

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

Pollutant: Fugitive Dust

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

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: See Table Glycol Storage Tank**

**Applicable Requirements**

(The following requirements apply to the emissions equipment described in Table Glycol Storage Tank)

**Table Glycol Storage Tank**

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Raw Material</b>	<b>Rated Capacity</b>	
020	020	Neal 1 Glycol Storage Tank	Ethylene Glycol	220 gal/yr (3000 gal capacity)	
021	021	Neal 2 Glycol Storage Tank	Ethylene Glycol	220 gal/yr (3200 gal capacity)	
022	022	Neal 3 Glycol Storage Tank	Ethylene Glycol	220 gal/yr (430 gal capacity)	
023	023	Glycol Storage Tank – Breathing loss	Ethylene Glycol	220 gal/yr (300 gal capacity)	

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

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

No Applicable Requirements

**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: 026**

Associated Equipment

Associated Emission Unit ID Number: 026

---

Emission Unit vented through this Emission Point: 026

Emission Unit Description: Emergency Stackout (Fugitive)

Raw Material/Fuel: Coal

Rated Capacity: 500 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: Fugitive Dust

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

Authority for Requirement: 567 IAC 23.3(2)"c"(1)

**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: 028**

Associated Equipment

Associated Emission Unit ID Number: 028

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Emission Unit vented through this Emission Point: 028  
Emission Unit Description: 11 Pit Coal Unloading (Fugitive)  
Raw Material/Fuel: Coal  
Rated Capacity: 500 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: Fugitive Dust

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

Authority for Requirement: 567 IAC 23.3(2)"c"(1)

**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: 035**

Associated Equipment

Associated Emission Unit ID Number: 035

Emissions Control Equipment ID Number: CE015

Emissions Control Equipment Description: Pulse Jet Bag Filter

---

Emission Unit vented through this Emission Point: 035

Emission Unit Description: Neal 2 Flyash Silo Loading (Vent 1)

Raw Material/Fuel: Flyash

Rated Capacity: 20 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 Limits: 40%

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 90-A-184

**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: 036**

Associated Equipment

Associated Emission Unit ID Number: 036

Emissions Control Equipment ID Number: CE016

Emissions Control Equipment Description: Pulse Jet Bag Filter

---

Emission Unit vented through this Emission Point: 036

Emission Unit Description: Neal 2 Flyash Silo Loading (Vent 2)

Raw Material/Fuel: Flyash

Rated Capacity: 20 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 Limits: 40%

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 90-A-185

**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: 037**

Associated Equipment

Associated Emission Unit ID Number: 037

Emissions Control Equipment ID Number: CE017

Emissions Control Equipment Description: Pulse Jet Bag Filter

---

Emission Unit vented through this Emission Point: 037

Emission Unit Description: Neal 3 Flyash Silo Loading (Vent 1)

Raw Material/Fuel: Flyash

Rated Capacity: 20 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 Limits: 40%

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 90-A-186

**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: 038**

Associated Equipment

Associated Emission Unit ID Number: 038

Emissions Control Equipment ID Number: CE018

Emissions Control Equipment Description: Pulse Jet Bag Filter

---

Emission Unit vented through this Emission Point: 038

Emission Unit Description: Neal 2 Flyash Silo Loading (Vent 2)

Raw Material/Fuel: Flyash

Rated Capacity: 20 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 Limits: 40%

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 90-A-187

**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: 060**

Associated Equipment

Associated Emission Unit ID Number: 060

---

Emission Unit vented through this Emission Point: 060  
Emission Unit Description: Coal Conveyor Bradford Breaker  
Raw Material/Fuel: Coal  
Rated Capacity: 1000 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 Limits: 20%  
Authority for Requirement: 567 IAC 23.1(2)"v"  
Iowa DNR Construction Permit 04-A-894

Pollutant: Particulate Matter  
Emission Limits: 0.1 gr/scf  
Authority for Requirement: 567 IAC 23.3(2)"a"  
Iowa DNR Construction Permit 04-A-894

**Operational Limits & Requirements**

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

**NSPS Requirements:**

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

**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: 062**

### Associated Equipment

Associated Emission Unit ID Number: 062

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Emission Unit vented through this Emission Point: 062

Emission Unit Description: Coal Conveyor Vibrating Screen

Raw Material/Fuel: Coal

Rated Capacity: 1000 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 Limits: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"

Iowa DNR Construction Permit 04-A-895

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/scf

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

Iowa DNR Construction Permit 04-A-895

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

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

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

**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: 064**

Associated Equipment

Associated Emission Unit ID Number: 064

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Emission Unit vented through this Emission Point: 064  
Emission Unit Description: Tower 2 Stackout (Fugitive)  
Raw Material/Fuel: Coal  
Rated Capacity: 3200 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: Fugitive Dust

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

Authority for Requirement: 567 IAC 23.3(2)"c"(1)

**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: 065**

Associated Equipment

Associated Emission Unit ID Number: 065

---

Emission Unit vented through this Emission Point: 065  
Emission Unit Description: Tower 2A Stackout (Fugitive)  
Raw Material/Fuel: Coal  
Rated Capacity: 3200 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: Fugitive Dust

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

Authority for Requirement: 567 IAC 23.3(2)"c"(1)

**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: 066**

### Associated Equipment

Associated Emission Unit ID Number: 066

---

Emission Unit vented through this Emission Point: 066

Emission Unit Description: 2A Coal Conveying

Raw Material/Fuel: Coal

Rated Capacity: 3200 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 Limits: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"

Iowa DNR Construction Permit 04-A-896

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/scf

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

Iowa DNR Construction Permit 04-A-896

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

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

NSPS Requirements:

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)"v"  
40 CFR 60 Subpart Y

**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.

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 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 conducting any renovation or demolition activities at the facility. *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. 5<sup>th</sup> 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 7<sup>th</sup> Street, Suite I  
Des Moines, IA 50309  
(515) 725-0268

**Field Office 6**

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

## **V. Appendices: Acid Rain Permits**



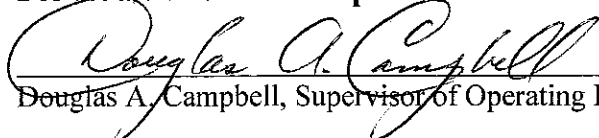
AIR QUALITY BUREAU  
7900 Hickman Rd., Suite 1  
Urbandale, IA 50322

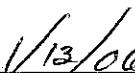
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## Phase II Acid Rain Permit

Issued to: George Neal  
Operated by: MidAmerican Energy Company  
ORIS code: 1091  
Effective: For five years from the date of issuance.

For the Director of the Department of Natural Resources

  
Douglas A. Campbell, Supervisor of Operating Permits Section

  
Date 1/13/06

### Acid Rain Permit comprises the following:

- 1) Statement of Basis.
- 2) SO<sub>2</sub> allowances allocated under this permit and NO<sub>x</sub> requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- 4) The permit application submitted for this source, as corrected by the Iowa Department of Natural Resources (IDNR), Air Quality Bureau, Operating Permit Section. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

#### 1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with Iowa Code paragraph 455B.133[8"a"], and Titles IV and V of the Clean Air Act, the Iowa Department of Natural Resources (IDNR), Air Quality Bureau, Operating Permit Section issues this permit pursuant to 567 Iowa Administrative Code (IAC) 22.135(455B) to 22.145(455B) and 567 IAC 22.100(455B) to 22.116(455B). The compliance options are approved as proposed in the attached application.

#### 2) SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for each affected unit

		2006	2007	2008	2009	2010	2011
<b>Unit 1</b>	SO <sub>2</sub> allowances, under Table 2 of 40 CFR part 73.	2309*	2309*	2309*	2309*	2314*	2314*

		2006	2007	2008	2009	2010	2011
<b>Unit 2</b>	SO <sub>2</sub> allowances, under Tables 2 of 40 CFR part 73.	9081*	9081*	9081*	9081*	4405*	4405*
	NO <sub>x</sub> limit (Early Elect through Dec. 31, 2007)	<p>Pursuant to 40 CFR part 76, The Iowa Department of Natural Resources approves a NO<sub>x</sub> emission limitation compliance plan for Unit 2. The early election portion of the NO<sub>x</sub> compliance plan is effective from Date , 2005 through December 31, 2007. Under the early election portion of the NO<sub>x</sub> compliance plan, this unit's the annual average NO<sub>x</sub> emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.5(a)(2), which is 0.50 lbs/mmBtu for dry bottom wall-fired units.</p> <p>On January 1, 2008, under the remainder of the NO<sub>x</sub> compliance plan, this unit's annual average NO<sub>x</sub> emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.7(a)(2), which is 0.46 lbs/mmBtu for dry bottom wall-fired units.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and the requirements covering excess emissions.</p>					

**SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for each affected unit continued**

		2006	2007	2008	2009	2010	2011
<b>Unit 3</b>	SO <sub>2</sub> allowances, under Tables 2 of 40 CFR part 73.	12,293*	12,293*	12,293*	12,293*	8556*	8556*
	NO <sub>x</sub> limit (Early Elect through Dec. 31, 2007)	<p>Pursuant to 40 CFR part 76, The Iowa Department of Natural Resources approves a NO<sub>x</sub> emission limitation compliance plan for Unit 3. The early election portion of the NO<sub>x</sub> compliance plan is effective from Date , 2005 through December 31, 2007. Under the early election portion of the NO<sub>x</sub> compliance plan, this unit's the annual average NO<sub>x</sub> emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.5(a)(2), which is 0.50 lbs/mmBtu for dry bottom wall-fired units.</p> <p>On January 1, 2008, under the remainder of the NO<sub>x</sub> compliance plan, this unit's annual average NO<sub>x</sub> emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.7(a)(2), which is 0.46 lbs/mmBtu for dry bottom wall-fired units.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and the requirements covering excess emissions.</p>					

\* The number of allowances allocated to Phase II affected units by U.S. EPA in 40 CFR part 73 Table 2 (Revised September 28, 1998). In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (See 40 CFR 72.84).

**3) Comments, Notes and Justifications:**

Renewal of the Phase II SO<sub>2</sub> and NO<sub>x</sub> permit.

Note that the annual average nitrogen oxides (NO<sub>x</sub>) emission limits are covered by the EPA approved NO<sub>x</sub> Early Election Plan which is in effect from January 1, 1997 through December 31, 2007. On January 1, 2008 the NO<sub>x</sub> emission limits change to the Revised NO<sub>x</sub> emission limitations for Group 1, Phase II boilers (40 CFR 76.7).

**4) Permit Application:** Attached.



George Neal North

Plant Name (from Step 1)

**Permit Requirements****STEP 3**Read the  
standard  
requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
- (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
- (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

**Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

**Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
- (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
- (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**STEP 3,  
Cont'd.**

**Nitrogen Oxides Requirements** The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

George Neal North
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Plant Name (from Step 1)

Step 3,  
Cont'd.

**Liability, Cont'd.**

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

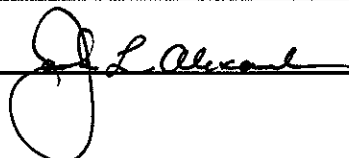
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**STEP 4**

**Certification**

Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Jack L. Alexander	
Signature 	Date 6-19-02



# Phase II NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

This submission is:  New  Revised  Renewal

**STEP 1**

Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name George Neal North	IA State	1091 ORIS Code
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**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID#	ID#	ID#	ID#	ID#	ID#
2	3				
Type DBW	Type DBW	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

George Neal North

Plant Name (from Step 1)

**STEP 2, cont'd.**

ID# 2	ID# 3	ID#	ID#	ID#	ID#
Type DBW	Type DBW	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)

(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)

(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

(p) Repowering extension plan approved or under review

**STEP 3**  
Read the standard requirements and certification, enter the name of the designated representative, sign &

**Standard Requirements**

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

**Special Provisions for Early Election Units**

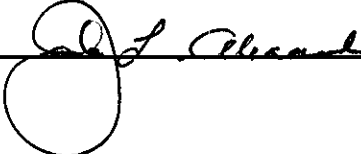
Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Jack L. Alexander	
Signature		Date 6-19-02