# Iowa Department of Natural Resources Draft Title V Operating Permit

Name of Permitted Facility: IPL - Ottumwa Generating Station

Facility Location: 20775 Power Plant Road

Ottumwa, Iowa 52501

Air Quality Operating Permit Number: 98-TV-009R3

**Expiration Date: \*\*DATE\*\*** 

Permit Renewal Application Deadline: \*\*DATE\*\*

**EIQ Number: 92-2774** 

Facility File Number: 90-07-001

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#### Responsible Official

Name: Danny Lamb

**Title: Senior Manager Generation Operations** 

Mailing Address: 20775 Power Plant Road, Ottumwa, IA 52501-8797

Phone#: (319) 786-2967

#### **Permit Contact Person for the Facility**

**Name: Matt Loehr** 

DW

**Title: Senior Environmental Specialist** 

Mailing Address: 20775 Power Plant Road, Ottumwa, IA 52501-8797

Phone #: (641) 935-2971

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 24, and is issued subject to the terms and conditions contained in this permit.

#### For the Director of the Department of Natural Resources

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Marnie Stein, Supervisor of Operating Permits Section

Date

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### **Abbreviations**

acfm	.actual cubic feet per minute
BACT	.Best Available Control Technology
CFR	Code of Federal Regulations
EIQ	.emissions inventory questionnaire
°F	degrees Fahrenheit
gr./dscf	grains per dry standard cubic foot
hp	horsepower
	Iowa Administrative Code
IDNR	Iowa Department of Natural Resources
lb./hr	.pounds per hour
lb./MMBtu	pounds per million British thermal units
MMBtu/hr	.million British thermal units per hour
MVAC	.motor vehicle air conditioner
ng/J	nanograms per joule
_	new source performance standards
ppmv	.parts per million by volume
scfm	standard cubic feet per minute
	Standard Industrial Classification
TR	A Transformer-Rectifier set in an electrostatic precipitator
	United States Environmental Protection Agency
<b>Pollutants</b>	
PM	.particulate matter
	particulate matter ten microns or less in diameter
$SO_2$	=

SO<sub>2</sub> .....sulfur dioxide SO<sub>x</sub>.....Sulfur Oxides CO.....carbon monoxide CO<sub>2</sub>.....carbon dioxide HAPs .....hazardous air pollutants

## I. Facility Description and Equipment List

Facility Name: IPL - Ottumwa Generating Station Permit Number: 98-TV-009R3

Facility Description: Electric Services (SIC 4911)

#### **Equipment List**

Emission Point Number	Associated Emission Unit Number	Associated Emission Unit Description	DNR Construction Permit
	1	Boiler, Dry Bottom Tangentially Fired	
	317	Bottom and Economizer Ash Conveyer	
	300	DFGD By-Product Vacuum Exhauster 3	
1	302	DFGD By-Product Vacuum Exhauster 1	78-A-019-P17
	308	DFGD Recycle Product Vacuum Exhauster 1	
	309	DFGD Recycle Product Vacuum Exhauster 2	
	310	DFGD Recycle Product Vacuum Exhauster 3	
2	2-6	Coal Pile, Open Storage	N/A
3	3-59	West Rotary Car Dumper	78-A-096-S2
4	4-59	East Rotary Car Dumper	78-A-097-S3
8	8-60	Coal Conveying in Transfer House	07-A-1357-P
10	10-61	Coal Crusher House	10-A-329-P2
11	11-15	Coal Pile Stacker/Reclaimer	N/A
12	12-14	Emergency Conveyer to Coal Pile	N/A
38	38-56	2 Lime Silos	99-A-174-S4
56	56-100	#2 Fuel Oil Tank West, 846,000 Gallons, Vertical Fixed Roof	N/A
57	57-101 #2 Fuel Oil Tank East, 846,000 Gallons, Vertical Fixed Roof		N/A
67	67-34	Boiler for Plant Heat	04-A-816-S5
69	69-31	NUVA Feeder Room Vent (29 Fans)	N/A
71	71-29	Welding Booth	04-A-817
72a	72-27	West Side Coal Silo	18-A-121-P
73a	73-28	East Side Coal Silo	18-A-122-P
75	23	Parts Washer, Main Building	99-A-175-S2
78	78-18	Cargill Coal Silo	04-A-818
79	79-18	Cargill Silo Truck Loading Chute	N/A
80	80-22	Fly Ash Silo Unloading Chute and C-Stone Production	N/A
92	92-48	Emergency Generator Combustion Turbine	99-A-177-S1
100	100	Coal Pile Bulldozing	N/A

## **Equipment List**

Emission Point Number	Associated Emission Unit Number	Associated Emission Unit Description	DNR Construction Permit	
200	200-1	Fly Ash Facility, West	05-A-613	
201	200-2	Fly Ash Facility, East	05-A-614	
202	202	Fly Ash Facility Truck Loadout	05-A-615-S1	
301	301	Dry Flue Gas Desulfurization (DFGD) By-Product Silo	11-A-641-S1	
306	306	Lime Silo	11-A-642-S1	
307	307	DFGD Recycle Product Silo	11-A-643-S1	
311	311	Mercury Sorbent Silo	11-A-644-S1	
	312a	Ash Silo Conditioned Ash Truck Loadout (Fugitive)		
312b		Ash Silo Loadout (Fugitive)	10 A 670	
312-F	312c	Pyrites Dewater Bin 1 Loadout (Fugitive)	18-A-670	
	312d	Pyrites Dewater Bin 2 Loadout (Fugitive)		
312	312	DFGD By-Product Silo Loadout		
313	313	SDA 0101 Flop Gast West	16-A-322	
314	1			
315	315	Telescopic Unloader Vent	18-A-673	
313-F	313-F	Coal Sludge Loading Dewater Bin 1 (Fugitive)	18-A-671	
314-F	314-F	Coal Sludge Loading Dewater Bin 2	18-A-672	
316-F	316-F	Settling /Surge Tank (Fugitive)	18-A-674	

## **Insignificant Activities Equipment List**

Insignificant Emission Unit Number	Insignificant Emission Unit Description		
65-91-48	Fuel Oil Retention Tank (100 Gallons)		
65-91-48a	Lube Oil Tank (8,550 Gallons)		
85-12	FD Fan Lubricating Oil System		
54-20	Sulfuric Acid Tank (8,150 Gallons)		
47-47	Lube Oil Vapor Extractor		
66	Soot-blower Air Receiving Tank (3,700 Gallons)		
57	Condensate Storage Tank (484,575 Gallons)		
55-9	Diesel Fuel Tank (2,000 Gallon)		
37	HX Auz Detraining Section of HX		
12	FD Fan Lubricating Oil System		
22	Fly Ash Silo		
103	550 Gallon Gasoline Tank		
106	1,000 Gallon Diesel Tank (Alberici Construction Site )		
110	550 Gallon On-Road Diesel Storage Tank		

## **Insignificant Activities Equipment List**

Insignificant Emission Unit Number	Insignificant Emission Unit Description
111	550 Gallon Off-Road Diesel Storage Tank
112	1,000 Gallon On-Road Diesel Tank at the NMC Bldg.
113	Two Sulfuric Acid Storage Tanks
114	7,500 Gallon AST for 93% Sulfuric Acid
HAUL ROAD	Haul Road

#### **II. Plant-Wide Conditions**

Facility Name: IPL - Ottumwa Generating Station

Permit Number: 98-TV-009R3

Permit conditions are established in accord with 567 Iowa Administrative Code rule 24.108. When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024 and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix D.

#### **Permit Duration**

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

Commencing on: \*\*DATE\*\*

Ending on: \*\*DATE\*\*

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 24.110 - 24.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 24.115.

#### **Emission Limits**

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

Opacity (visible emissions): 40% opacity

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

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

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

#### Particulate Matter:

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

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from the equation provided in 23.3(2)"a"(2) or amount specified in a permit if based on an emission standard of 0.1

grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

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

<u>Fugitive Dust:</u> Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits 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 roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) 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 public 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 be 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, fertilizer or limestone.
- 4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
- 5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
- 6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

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

#### 40 CFR 60, Subpart D Requirements

This facility is subject to Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971 – 40 CFR 60, Subpart D and the affected unit is EU 1 (EP 1: Main Plant Boiler). Applicable subpart D requirements are incorporated into the Emission-Point Specific Conditions Section. See Appendix B for the link of the Standard.

Authority for Requirement: 40 CFR 60, Subpart D

567 IAC 23.1(2)"a"

#### 40 CFR 60, Subpart Y Requirements

This facility is subject to Standards of Performance for Coal Preparation and Processing Plants [40 CFR 60, Subpart Y]. See Appendix B for the link of the Standard.

Authority for Requirement: 40 CFR 60, Subpart Y

567 IAC 23.1(2)""

#### 40 CFR 60 Subpart GG

EU 92-48 is subject to the NSPS Subpart GG, *Standards of Performance for Stationary Gas Turbines*, as a unit constructed after October 3, 1977 but prior to October 3, 1982. See Appendix B for the link of the Standard.

Authority for Requirement: 40 CFR 60, Subpart GG

567 IAC 23.1(2)"aa"

#### 40 CFR 63, Subpart DDDDD Requirements

The Boiler for Plant Heat, EU 67 - 34 is subject to National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT) [40 CFR Part 63, Subpart DDDDD]. See Appendix B for the link of the Standard.

Authority for Requirements: 40 CFR 63, Subpart DDDDD

#### 40 CFR 63 Subpart UUUUU Requirements

Boiler #1 (EU 001) is subject to the following federal regulation: National Emission Standards for Hazardous Air Pollutants: Coal and Oil-Fired Electric Utility Steam Generating Units [40 CFR Part 63, Subpart UUUUU (40 CFR §63.9980 – 40 CFR §63.10042)]. The unit is considered an existing coal fired EGU as defined in § 63.10042, within a subcategory. See Appendix B for the link of the Standard.

Authority for Requirements: 40 CFR 63, Subpart UUUUU

#### **System-wide Consent Decree Requirements**

Interstate Power and Light Company (IPL) has entered into a Consent Decree [<u>United States of America and The State of Iowa, and The County of Linn, Iowa and Sierra Club v. Interstate Power and Light Company</u>, Civil Action No.: C15-0061; United States District Court for the Northern District of Iowa (September 2, 2015)]. The permittee shall comply with all applicable system-wide requirements in Appendix C – System-wide Consent Decree Requirements for IPL Facilities in Iowa.

Authority for Requirement: DNR Construction Permit 78-A-019-P15 567 IAC 24.108(1)

Further information on the System-wide Consent Decree Requirements for IPL Facilities in Iowa is contained in the Appendix.

## **III. Emission Point-Specific Conditions**

Facility Name: IPL - Ottumwa Generating Station

Permit Number: 98-TV-009R3

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

The following emission units and control equipment vent to the boiler baghouse (CE 1C) and EP 1:

Emission Unit	Emission Unit Description	Maximum Rated Capacity	Control Equipment
		8,669	SmartBurn® (CE 1A);
1	Boiler #1 (Unit 1)	MMBTU/hr	Electrostatic Precipitator (ESP; CE 1) <sup>(1)</sup> ;
1	John #1 (Ollit 1)	(726 MW,	Activated Carbon Injection (ACI; CE 1D);
			Selective Catalytic Reduction (SCR; CE 1E);
317	Pottom and Fannamizer Ash Conveyor	16.3 tons/hr	Dry Flue Gas Desulfurization (DFGD; CE 1B);
317	Bottom and Economizer Ash Conveyor	10.5 tolls/fil	and Calcium Bromide (CaBr) Injection (CE 1F)
300	DFGD By-Product Vacuum Exhauster 3	51 tons/hr	Baghouse (CE 300)
302	DFGD By-Product Vacuum Exhauster 1	51 tons/hr	Baghouse (CE 302)
308	DFGD Recycle Vacuum Exhauster 1	90 tons/hr	Baghouse (CE 308)
309	DFGD Recycle Vacuum Exhauster 2	90 tons/hr	Baghouse (CE 309)
310	DFGD Recycle Vacuum Exhauster 3	90 tons/hr	Baghouse (CE 310)

<sup>(1)</sup> The owner or operator is not required to operate the Electrostatic Precipitator (ESP, CE 1) as long as the owner or operator is able to demonstrate compliance with the emission limits listed in this permit without the ESP in operation.

Raw Material/Fuel: Boiler #1 (EU 1)

• Coal

Refined coal

• #1 distillate oil

• #2 distillate oil

Natural gas

switchgrass

## **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.

#### **Best Available Control Technology (BACT) Emission Limits**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	tons/yr <sup>1</sup>	Additional Limits
Particulate Matter (PM) – Federal	NA	$0.047$ lb/MMBTU $^2$
Opacity	NA	20% 4
Sulfur Dioxide (SO <sub>2</sub> ) <sup>3</sup>	NA	1.20 lb/MMBTU <sup>5</sup>
Carbon Monoxide (CO) <sup>3</sup>	6,189	0.163 lb/MMBTU <sup>5</sup>
Carbon dioxide (CO <sub>2</sub> ) <sup>3</sup>	NA	2,927.1 lb/MWh (net) <sup>5, 6</sup>
Carbon dioxide equivalents (CO <sub>2</sub> e)	8,000,325 7	NA

Standard is a 12-month rolling total. The standard includes all periods of operation including periods of startup, shutdown, and malfunction (SSM).

- 2) Standard is expressed as the average of three (3) stack test runs.
- Compliance with the emission standards shall be demonstrated through the use of Continuous Emissions Monitoring Systems (CMS). See Compliance Demonstration(s) and Continuous Emissions Monitoring for more information on compliance with the use of CMS.
- 4) Standard is a six (6) minute average.
- Standard is a thirty (30) day rolling average not including periods of SSM.
- MWh = megawatt-hour. MWh (net) shall be determined by subtracting the metered megawatt-hour value for station service from the metered megawatt-hour value for gross generation. Alternatively, net generation may be obtained directly from a power metering device for net generation, if the metering instrument is electrically equivalent to gross generation minus station service.
- Compliance shall be determined by multiplying the mass of each greenhouse gas (GHG) as defined in 40 CFR §98.6 by its respective global warming potential (GWP) as defined in 40 CFR Part 98, Table A-1 and summing the results. The version of Table A-1 used shall be the version promulgated as of the date of the issuance of permit 78-A-019-P10, which listed the following GWPs:
  - $CO_2 = 1$
  - $CH_4 = 21$
  - $N_2O = 310$

The  $CO_2$  mass emissions shall be obtained from the required CMS and the mass emissions for methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) shall be determined based on the most recent stack test results approved by the Department.

Authority for Requirement: DNR Construction Permit 78-A-019-P17

#### **Consent Decree Emission Limits** (1)

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits were established by the Consent Decree [*United States of America and The State of Iowa, and The County of Linn, Iowa and Sierra Club v. Interstate Power and Light Company*, Civil Action No.: C15-0061;United States District Court for the Northern District of Iowa (September 2, 2015)] and shall not be exceeded:

Pollutant 24-hr Rolling Average 2), 3)		30-day Rolling Average 4), 5)	12-month Rolling Average <sup>6)</sup>	
Particulate Matter (PM) – Federal	0.015 lb/MMBTU <sup>7)</sup>	NA	NA	
Sulfur Dioxide (SO <sub>2</sub> )	NA	0.075 lb/MMBTU	NA	
Nitrogen Oxides (NO <sub>x</sub> ) [pre-SCR installation]	NA	0.210 lb/MMBTU <sup>8)</sup>	0.160 lb/MMBTU <sup>3)</sup>	
Nitrogen Oxides (NO <sub>x</sub> ) [post-SCR installation]	NA	0.080 lb/MMBTU <sup>9)</sup>	NA	

- The emission limits in this table were established by the Consent Decree [*United States of America and The State of Iowa, and The County of Linn, Iowa and Sierra Club v. Interstate Power and Light Company,* Civil Action No.: C15-0061; United States District Court for the Northern District of Iowa (September 2, 2015)]. See "Operational Limits & Reporting/Record keeping Requirements" for requirements from the Consent Decree.
- As defined by Consent Decree Paragraph 7, the 24-hr rolling average shall be determined by calculating an arithmetic average of the current Unit Operating Hour emission rate in lb/MMBTU and the previous 23 Unit Operating Hours. A new 24-hr rolling average emission rate shall be calculated for each new Unit Operating Hour. Each 24-hr rolling average emission rate shall include all emissions that occur during all periods of operation, including startup, shutdown, and malfunction (SSM).
- As defined by Consent Decree Paragraph 76, a Unit Operating Hour is each clock hour during which any fossil fuel is combusted at any time in the boiler.
- <sup>4)</sup> As defined by Consent Decree Paragraph 6, the 30-day rolling average emission rate shall be determined by calculating an arithmetic average of all hourly emission rates in lb/MMBTU for the current Unit Operating Day and all hourly emission rates in lb/MMBTU for the previous 29 Unit Operating Days. A new 30-day rolling average emission rate shall be calculated for each new Unit Operating Day. Each 30-

- day rolling average emission rate shall include all emissions that occur during all periods within any Unit Operating Day, including emissions from SSM.
- As defined by Consent Decree Paragraph 75, a Unit Operating Day is any day on which the boiler fires a fossil fuel.
- As defined by Consent Decree Paragraph 5, the 12-month rolling average emission rate shall be determined by calculating an average of all hourly emission rates in lb/MMBTU for the current month and all hourly emission rates in lb/MMBTU from the previous 12 Unit Operating Months. A new 12-month rolling average emission rate shall be calculated for each new complete month in accordance with the provisions of the Consent Decree. Each 12-month rolling average emission rate shall include all emissions that occur during all periods of operating, including SSM. For purposes of calculating a 12-month rolling average emission rate, a Unit Operating Month means any month during which the boiler fires fossil fuel.
- As required by Consent Decree Paragraph 143, the owner or operator may operate Boiler #1 (EU 001) to achieve a filterable PM emission rate of no greater than 0.030 lb/MMBTU during periods of level 3 (high range) correlation testing under PS-11, Section 8.6(4) provided that such correlation testing is conducted in accordance with the procedures approved by EPA as part of the correlation plan approved under the Consent Decree.
- As required by Consent Decree Paragraph 93, the emission limit is in effect until 30 Operating Days after December 31, 2019.
- As required by Consent Decree Paragraph 93, the emission limit becomes effective 30 Operating Days after December 31, 2019.

Authority for Requirement: DNR Construction Permit 78-A-019-P17

Consent Decree Civil Action No.: C15-0061

#### **New Source Performance Standards (NSPS) Emission Limits**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	Emission Standard 1)	Reference (567 IAC)
Particulate Matter (PM) – Federal	43 ng/J heat input <sup>2)</sup>	23.1(2)"a" <sup>3)</sup>
Opacity <sup>4)</sup>	20% 5)	23.1(2)"a" <sup>3)</sup>
Sulfur Dioxide (SO <sub>2</sub> ) <sup>4)</sup>	520 ng/J heat input <sup>6)</sup>	23.1(2)"a" <sup>3)</sup>
Nitrogen Oxides (NO <sub>x</sub> ) <sup>4)</sup>	300 ng/J heat input <sup>7)</sup>	23.1(2)"a" <sup>3)</sup>

- Standard is expressed as the average of three (3) runs.
- 43 ng/J = 0.10 lb/MMBTU. See 40 CFR \$60.42(a)(1).
- Iowa Administrative Code (IAC) reference to New Source Performance Standards (NSPS) Subpart D (Standards of Performance for Fossil-Fuel-fired Steam Generators for Which Construction Is Commenced After August 17, 1971; 40 CFR §60.40 – 40 CFR §60.46).
- Opacity shall not exceed 20% (6-minute average), except for one (1) 6-minute period per hour of not more than 27% opacity. See 40 CFR §60.42(a)(2).
- 520 ng/J = 1.20 lb/MMBTU. Emission limit per 40 CFR §60.43(a)(2) when the unit is combusting solid fossil fuel or solid fossil fuel and wood residue. Per 40 CFR §60.43 alternative limits are:
  - 340 ng/J heat input (0.80 lb/MMBTU) when combusting liquid fossil fuel or liquid fossil fuel and wood residue [40 CFR §60.43(a)(1)].
  - Per 40 CFR §60.43(b), when different fossil fuels are combusted simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PS_{SO2} = \frac{[y(340) + z(520)]}{y + z}$$

Where:

PS<sub>SO2</sub> = the prorated standard for SO<sub>2</sub> when burning different fuels simultaneously, in nanograms per joule (ng/J) heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired.

y = the percentage of total heat input derived from liquid fossil fuel

z = the percentage of total heat input derived from solid fossil fuel.

- In accordance with 40 CFR §60.43(d), as an alternate to meeting the requirements of 40 CFR §60.43(a) and 40 CFR §60.43(b), an owner or operator can petition the Administrator (in writing) to comply with 40 CFR §60.43Da(i)(3) or comply with 40 CFR §60.42b(k)(4) as applicable to the affected source. If the Administrator grants the petition, the source will from then on (unless the unit is modified or reconstructed in the future) have to comply with the requirements in 40 CFR §60.43Da(i)(3) or 40 CFR §60.42b(k)(4) as applicable to the affected source.
- In accordance with 40 CFR §60.43(c), compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels. In addition, per 40 CFR §60.45(g)(2), excess emissions are defined as:
- For affected facilities electing not to comply with 40 CFR §60.43(d), any three hour period during which the average emissions [arithmetic average of three contiguous one hour periods] of SO<sub>2</sub> as measured by a CEMS exceed the applicable standard in 40 CFR §60.43; or
- For affected facilities electing to comply with 40 CFR §60.43(d), any 30 operating day period during which the average emissions [arithmetic average of all one hour periods during the 30 operating days) of SO<sub>2</sub> as measured by a CEMS exceed the applicable standard in 40 CFR §60.43. Facilities complying with the 30 day SO<sub>2</sub> standard shall use the most current associated SO<sub>2</sub> compliance and monitoring requirements in 40 CFR §60.48Da and 40 CFR §60.49Da or 40 CFR §60.45b and 40 CFR §60.47b as applicable.
- 6) 300 ng/J = 0.70 lb/MMBTU. Emission limit per 40 CFR §60.44(a)(3) when the unit is combusting solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25%, by weight, or more of coal refuse). Per 40 CFR §60.44 alternative limits are:
  - 86 ng/J heat input (0.20 lb/MMBTU) when combusting gaseous fossil fuel.
  - 129 ng/J heat input (0.30 lb/MMBTU) when combusting liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.
  - Per 40 CFR §60.44(b), when different fossil fuels are combusted simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PS_{NOx} = \frac{[w(260) + x(86) + y(130) + z(300)]}{w + x + y + z}$$

#### Where:

 $PS_{NOx}$  = the prorated standard for  $NO_x$  when burning different fuels simultaneously, in nanograms per joule (ng/J) heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired.

w = the percentage of total heat input derived from lignite

x = the percentage of total heat input derived from gaseous fossil fuel

y = the percentage of total heat input derived from liquid fossil fuel

z = the percentage of total heat input derived from solid fossil fuel.

• In accordance with 40 CFR §60.44(e), as an alternate to meeting the requirements of 40 CFR §60.44(a) and 40 CFR §60.44(b), an owner or operator can petition the Administrator (in writing) to comply with 40 CFR §60.44Da(e)(3). If the Administrator grants the petition, the source will from then on (unless the unit is modified or reconstructed in the future) have to comply with the requirements in 40 CFR §60.44Da(e)(3).

In addition, in accordance 40 CFR §60.45(g)(3), excess emissions are defined as:

- For affected facilities electing not to comply with 40 CFR §60.44(e), any three hour period during which the average emissions [arithmetic average of three contiguous one hour periods] of SO<sub>2</sub> as measured by a CEMS exceed the applicable standard in 40 CFR §60.44; or
- For affected facilities electing to comply with 40 CFR §60.44(e), any thirty (30) operating day period during which the average emissions [arithmetic average of all one (1) hour periods during the thirty (30) operating days] of NO<sub>x</sub> as measured by a CEMS exceed the applicable standard in 40 CFR §60.44. Facilities complying with the 30-day NO<sub>x</sub> standard shall use the most current associated NO<sub>x</sub> compliance and monitoring requirements in 40 CFR §60.48Da and 40 CFR §60.49Da.

Authority for Requirement: DNR Construction Permit 78-A-019-P17 567 IAC 23.1(2)"a" 40 CFR 60 Subpart D

#### **Other Emission Limits**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr <sup>(1)</sup>	tons/yr <sup>(2)</sup>	Other Limits	Reference/Basis
Particulate Matter (PM) – State	638.8 <sup>(3)</sup>	NA	NA	PSD "Synthetic Minor"
$PM_{10}$	279.65 <sup>(4)</sup>	NA	NA	NAAQS
Sulfur Dioxide (SO <sub>2</sub> )	NA	33,541 <sup>(3)</sup>	NA	PSD "Synthetic Minor"
Nitrogen Oxides (NO <sub>x</sub> )	NA	7,434.3 <sup>(5)</sup>	NA	PSD "Synthetic Minor"
Carbon Monoxide (CO)	7,245.0 <sup>(4),(6)</sup>	4,548 <sup>(7)</sup>	NA	NAAQS
Sulfuric Acid Mist (SAM, H <sub>2</sub> SO <sub>4</sub> )	3.68 <sup>(8)</sup>	NA	NA	PSD Minor Increase

- 1) The emission limit is expressed as the average of three stack test runs.
- The emission limit is based on a 12-month rolling total.
- Emission limit established as part of Project Number 92-184 in order to ensure the project was a "synthetic minor" for the Prevention of Significant Deterioration (PSD) program.
- Emission rate used in the computer aided dispersion model to demonstrate the impacts from Project Number 11-219 are less than the PSD significant impact level and therefore, did not require full National Ambient Air Quality Standards (NAAQS) analysis.
- Standard based on "netting" to demonstrate Project Number 11-219 does not have a "significant net emissions increase" for PSD as defined in 567 IAC 33.3(1).
- 6) Standard is a one hour standard.
- <sup>7)</sup> Standard imposed as part of Project Number 09-511.
- Emission rate used in Project Number 16-075 to demonstrate the addition of the SCR (CE 1E) did not have a "significant net emissions increase" for PSD as defined in 567 IAC 33.3(1).

Authority for Requirement: DNR Construction Permit 78-A-019-P17

Cross-State Air Pollution Rule (CSAPR) (a.k.a., Transport Rule (TR))

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Annual, Nitrogen Oxides (NO<sub>x</sub>) Ozone Season Group 2, Sulfur Dioxide (SO<sub>2</sub>) Group 1

Emission Limits: Nitrogen Oxides and Sulfur Dioxide Allowances

Authority for Requirement: 40 CFR Part 97 (See appendix for requirements)

#### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. Boiler #1 (EU 001) shall be limited to combusting the following fuels:
  - Coal

• Natural gas

• #1 distillate oil

Switchgrass

- #2 distillate oil
- B. The heat input into Boiler #1 (EU 001) shall not exceed 8,669 MMBTU/hr (24-hr block average).
- C. The sulfur (S) content of any fuel or combination of fuels fired in Boiler #1 (EU 001) shall not exceed 1.3% (by weight).
- D. The owner or operator shall monitor and record the following:
  - (1) The sulfur (S) content of all fuels or combination of fuels combusted in Boiler #1 (EU 001) and
  - (2) For each day of operation:
    - (a) The hours of operation for Boiler #1 (EU 001),

- (b) The total heat input (MMBTU) for the day for Boiler #1 (EU 001), and
- (c) The hourly average heat input (MMBTU/hr) for Boiler #1 (EU 001).
- E. As required by Consent Decree Paragraph 92, the owner or operator shall "continuously operate" the Low NO<sub>x</sub> Combustion System (CE 1A). Per Paragraph 15 of the Consent Decree, the term "continuously operate" means the Low NO<sub>x</sub> Combustion System (CE 1A) shall be operated at all times when Boiler #1 (EU 001) is in operation consistent with the technological limitations, manufacturer's specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions [as defined in 40 CFR §60.11(d)].
- F. As required by Consent Decree Paragraph 93, the owner or operator shall install an SCR system on or before December 31, 2019. Commencing on December 31, 2019, and continuing thereafter, the owner or operator shall "continuously operate" the SCR. Per Paragraph 15 of the Consent Decree, the term "continuously operate" means the SCR (CE 1E) shall be operated at all times when Boiler #1 (EU 001) is in operation consistent with the technological limitations, manufacturer's specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions [as defined in 40 CFR §60.11(d)]. Upon termination of the Consent Decree, the owner or operator shall submit a report in coordination with its Title V reporting schedule that includes the following information regarding the SCR (CE 1E):
  - (1) An identification of all periods when the SCR (CE 1E) was not operating,
  - (2) The reason(s) for the SCR (CE 1E) not operating, and
  - (3) The basis for the owner or operator's compliance or non-compliance with the continuous operation requirements.
- G. As required by Consent Decree Paragraph 116, the owner or operator shall "continuously operate" the FGD (CE 1B). Per Paragraph 15 of the Consent Decree, the term "continuously operate" means the FGD (CE 1B) shall be operated at all times when Boiler #1 (EU 001) is in operation consistent with the technological limitations, manufacturer's specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions [as defined in 40 CFR §60.11(d)]. Upon termination of the Consent Decree, the owner or operator shall submit a report in coordination with its Title V reporting schedule that includes the following information regarding the FGD (CE 1B):
  - (1) An identification of all periods when the FGD (CE 1B) was not operating,
  - (2) The reason(s) for the FGD (CE 1B) not operating, and
  - (3) The basis for the owner or operator's compliance or non-compliance with the continuous operation requirements.
- H. As required by Consent Decree Paragraphs 137 and 138, the owner or operator shall:
  - (1) Continuously operate each PM control device to maximize emission reductions at all times when the unit is in operation. Notwithstanding the foregoing sentence, the owner or operator is not required to continuously operate an electrostatic precipitator (ESP) on any unit if a baghouse is installed and operating to replace the PM control device function of the ESP on that unit.
  - (2) Except as required during correlation testing under 40 CFR Part 60, Appendix B, PS11 and QA/QC requirements under Appendix F, Procedure 2, the owner or operator shall, at a minimum, ensure that to the extent reasonably practicable:
    - (a) Where the control device is an ESP, each section of each ESP is fully energized, and where the control device is a baghouse, each compartment, except for any

- compartment specifically designated and designed as a spare compartment, of each baghouse is operational;
- (b) Any failed ESP section or baghouse compartment is repaired at the next planned outage (or unplanned outage of sufficient length);
- (c) Where applicable, the automatic control systems on each ESP are operated to maximize PM collection efficiency;
- (d) Each opening in the casings, ductwork, and expansion joints for each ESP and each baghouse is inspected and repaired during the next planned unit outage (or unplanned outage of sufficient length) to minimize air leakage;
- (e) Where applicable, the power levels delivered to each ESP are maintained consistent with manufacturer's specifications, the operational design of the unit and good engineering practices;
- (f) Where applicable, the plate-cleaning and discharge-electrode-cleaning systems for each ESP are optimized by varying the cycle time, cycle frequency, rapper-vibrator intensity, and number of strikes per cleaning event; and
- (g) For each unit with one (1) or more baghouses, a bag leak detection program is developed and implemented to ensure that leaking bags are promptly replaced.
- I. As required by Consent Decree Paragraph 140, the owner or operator shall "continuously operate" the Baghouse (CE 1C). Per Paragraph 15 of the Consent Decree, the term "continuously operate" means the Baghouse shall be operated at all times when Boiler #1 (EU 001) is in operation consistent with the technological limitations, manufacturer's specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions [as defined in 40 CFR §60.11(d)]. Upon termination of the Consent Decree, the owner or operator shall submit a report in coordination with its Title V reporting schedule that includes the following information regarding the Baghouse (CE 1C):
  - (1) All information necessary to determine compliance during the reporting period with:
    - (a) The obligation to optimize PM emissions controls.
  - (2) A log detailing:
    - (a) An identification of all periods when the Baghouse (CE 1C) was not operating,
    - (b) The reason(s) for the Baghouse (CE 1C) not operating, and
    - (c) The basis for the owner or operator's compliance or non-compliance with the continuous operation requirements.
- J. The minimum ammonia injection into the SCR (CE 1E) shall be 75 lb/hr of 19% aqueous ammonia solution based on an hourly average when the inlet temperature of the SCR (CE 1E) is above 537 °F (i.e. excluding periods of SSM). The owner or operator shall:
  - (1) Properly operate and maintain equipment to monitor the inlet temperature and the ammonia injection into the SCR (CE 1E). The monitoring device(s) and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
  - (2) Collect and record the ammonia injection rate into the SCR (CE 1E) on an hourly basis when the emission unit is operating, except for normal maintenance, calibration and replacement, and malfunctions of the meter.
  - (3) Collect and record the inlet temperature of the SCR (CE 1E) when the emission unit is operating. If the inlet temperature drops below 537 °F, the owner or operator shall note the reason the temperature dropped below 537 °F.

- K. The total lime slurry mixture injection flow rate into the FGD (CE 1B) shall be greater than 1,500 gallons per hour (gal/hr) based on a three (3) hour average during normal operation of Boiler #1 (EU 001), except for periods of maintenance recommended by the FGD (CE 1B) manufacturer. The owner or operator shall:
  - (1) Install, calibrate, operate, and maintain a monitoring device(s) to continuously measure the total lime slurry mixture injection rate into the FGD (CE 1B).
  - (2) Record the three (3) hour rolling average (in gal/hr) slurry injection flow rate into the FGD (CE 1B) when Boiler #1 (EU 001) is operating, except for periods of normal meter maintenance, calibration, replacement, and malfunctions.
  - (3) Shall conduct an inspection within eight (8) hours if the three (3) hour rolling average total lime slurry mixture injection flow rate falls below 1,500 gal/hr during normal operation of Boiler #1 (EU 001). The owner or operator shall take action as soon as possible to correct the problem and if the corrective action will take more than eight (8) hours the owner or operator shall notify the Department of the issue and resolution.
  - (4) Shall document all inspections and corrective actions taken.
- L. The pressure drop across the boiler baghouse (CE 1C) shall be maintained between 1.0 inches H<sub>2</sub>O 8.0 inches H<sub>2</sub>O (1-hr block average) during normal operating conditions (i.e. excluding periods of SSM). The owner or operator shall:
  - (1) Install, calibrate, operate, and maintain equipment to continuously monitor the pressure drop across the Boiler #1 Baghouse (CE 1C).
  - (2) Record the 1-hr block average pressure drop readings from the monitoring equipment.
  - (3) Report deviations of the pressure drop range to the Compliance Section of the Department only if the excursions outside of the range exceed 5% of the operating hours during a semi-annual reporting period (January 1 June 30 or July 1 December 31) or if excursions outside of the range last for more than eight (8) consecutive hours.
- M. A bag leak detection system shall be installed on the boiler baghouse (CE 1C) to meet the following criteria:
  - (1) At least one detector must be located in each compartment of the baghouse.
  - (2) The bag leak detection system must be installed, operated, calibrated and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in "Fabric Filter Bag Leak Detection Guidance", EPA-454/R-98-015, September 1997.
  - (3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.
  - (4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
  - (5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensors.
  - (6) The bag leak detection system must be equipped with an alarm system that will send an alert automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it can be easily heard or seen by plant operating personnel.
  - (7) The system's instrumentation and alarm may be shared among detectors.

- (8) The system's alarm shall sound no more than 5% of the operating time during a 6 month period.
- N. The owner or operator shall maintain the following records from the bag leak detection system:
  - (1) The date, time and duration of each system alarm.
  - (2) The time corrective action was initiated and completed.
  - (3) A brief description of the cause of the alarm and the corrective action.
  - (4) A record of the percent of operating time during each 6 month period that the alarm sounds. In calculating the operating time percentage,
    - (a) If an inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted.
    - (b) If corrective action is required, each alarm shall be counted as a minimum of one (1) hour.
    - (c) If it takes longer than one (1) hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.
- O. The owner or operator shall prepare a work practice manual documenting all efficiency practices (i.e. a "Work Practices Manual") at the facility, and submit the manual to the Department prior to the completion of construction of Project Number 11-219. This manual shall specifically address control equipment operation, boiler cleanliness practices (such as soot-blowing frequency), document the existing steam turbine design efficiency and combustion control optimizations at the plant, and all other efficiencies at the plant (Plant Number 90-07-001). The Work Practices Manual shall be implemented upon the later of the Department's review and approval or the completion of construction of Project Number 11-219. The Work Practices Manual shall be revised and submitted to the Department as necessary to document any proposed efficiency changes at the facility. The revised manual shall be implemented upon the Department's approval of the proposed changes.
- P. The owner or operator is not required to operate the Electrostatic Precipitator (ESP, CE 1) as long as the owner or operator is able to demonstrate compliance with the applicable emission limits without the ESP in operation.
- Q. The owner or operator shall meet all applicable recordkeeping and reporting requirements under NSPS Subparts A and D.
- R. The owner or operator shall maintain a log of all maintenance and inspection activities performed on all emission units and control equipment, except for the ESP (CE 1), listed above. This log shall include, but is not necessarily limited to:
  - (1) The date and time any inspection and/or maintenance was performed on any of the emission units and/or control equipment listed in the equipment table above;
  - (2) Any issues identified during the inspection and the date each issue was resolved;
  - (3) Any issues addressed during the maintenance activities and the date each issue was resolved;
  - (4) Identification of the staff member performing the maintenance or inspection.
- S. Upon termination of the Consent Decree, the owner or operator shall submit periodic reports as required by Title V to demonstrate compliance with all Consent Decree requirements contained within "Consent Decree Emission Limits". At a minimum, the information in the reports shall include all information necessary to determine compliance during the reporting period with:
  - (a) All 30-day rolling average emission rates for NO<sub>x</sub>;

- (b) The 30-day rolling average emission rate for SO<sub>2</sub>;
- (c) The 24-hour rolling average emission rate for PM; and
- (d) The 12-month rolling average emission rate for NO<sub>x</sub>.

Authority for Requirement: DNR Construction Permit 78-A-019-P17 Consent Decree Civil Action No.: C15-0061

#### **Federal Standards**

#### A. New Source Performance Standards (NSPS):

The following subparts apply to Boiler #1 (EU 001):

Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
A	General Provisions	NA	23.1(2)	§60.1 – §60.19
D	Standards of Performance for Fossil-Fuel- fired Steam Generators for Which Construction Is Commenced After August 17, 1971	Solid fossil fuel	23.1(2)"a"	§60.40 – §60.46

#### B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

Emission units (EUs 300, 302, 308, 309, and 310) are not subject to any NESHAP subparts at this time as there are no applicable subparts for their source category. Boiler #1 (EU 001) is subject to the following federal regulation: *National Emission Standards for Hazardous Air Pollutants: Coal and Oil-Fired Electric Utility Steam Generating Units* [40 CFR Part 63, Subpart UUUUU (40 CFR §63.9980 – 40 CFR §63.10042)]. The unit is considered an existing coal fired EGU as defined in § 63.10042, within a subcategory.

#### **Compliance Date:**

Before July 6, 2027, if your coal-fired or solid oil derived fuel-fired EGU does not qualify as a LEE for total non-mercury HAP metals, individual non-mercury HAP metals, or filterable particulate matter (PM), you must demonstrate compliance through an initial performance test and you must monitor continuous performance through either use of a particulate matter continuous parametric monitoring system (PM CPMS), a PM CEMS, or, for an existing EGU, compliance performance testing repeated quarterly (40 CFR § 63.10000 (c)(1)(iv)(A)).

Before July 6, 2027, if your coal-fired or solid oil-derived fuel-fired EGU does not qualify as a LEE for hydrogen chloride (HCl), you may demonstrate initial and continuous compliance through use of an HCl CEMS, installed and operated in accordance with Appendix B to this subpart. As an alternative to HCl CEMS, you may demonstrate initial and continuous compliance by conducting an initial and periodic quarterly performance stack test for HCl. If your EGU uses wet or dry flue gas desulfurization

technology (this includes limestone injection into a fluidized bed combustion unit), you may apply a second alternative to HCl CEMS by installing and operating a sulfur dioxide (SO2) CEMS installed and operated in accordance with part 75 of this chapter to demonstrate compliance with the applicable SO2 emissions limit (40 CFR  $\S$  63.10000 (c)(1)(v)).

Before July 6, 2027, if your coal-fired or solid oil-derived fuel-fired EGU does not qualify as a LEE for Hg, you must demonstrate initial and continuous compliance through use of a Hg

CEMS or a sorbent trap monitoring system, in accordance with appendix A to this subpart (40 CFR  $\S$  63.10000 (c)(1)(vi)).

On and after July 6, 2027, you may not pursue or continue to use the LEE option for your coal-fired or solid oil derived fuel-fired EGU for filterable PM or for non-mercury HAP metals. You must demonstrate compliance through an initial performance test, and you must monitor continuous performance with the applicable filterable PM emissions limit through the use of a PM CEMS or HAP metals CMS (40 CFR § 63.10000 (c)(1)(iv)(B)).

- A. The owner or operator shall comply with the general compliance requirements of NESHAP Subpart UUUUU per 40 CFR §63.10000.
- B. The owner or operator shall comply with the testing and initial compliance requirements of NESHAP Subpart UUUUU per 40 CFR §63.9984, §63.10005, §63.10006 and §63.10007.
- C. The owner or operator shall comply with the continuous compliance requirements of NESHAP Subpart UUUUU per 40 CFR §63.10010, §63.10011, §63.10020 and §63.10021.
- D. The owner or operator shall comply with the notification, reports, and records requirements of NESHAP Subpart UUUUU per 40 CFR §63.10030 through §63.10033.
- E. The owner or operator shall comply with the applicable general provisions of NESHAP Subpart A as required per 40 CFR §63.10040.

Authority for Requirement: 40 CFR 63 Subpart UUUUU

#### C. Acid Rain:

The facility (plant number 90-07-001) is subject to 40 CFR 72, 73, 75, 76, 77, and 78 definitions as emission units at this source are subject to the acid rain emission reduction requirements or the acid rain emission limitations, as adopted by the Department by reference (See 567 IAC 24.120 – 567 IAC 24.148). This emission unit is subject to the  $SO_2$  allowance allocation,  $NO_x$  emission limitations, and monitoring provisions of the federal acid rain program.

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft. from the ground): 600 Stack Opening, (inches, dia.): 300 Exhaust Flow Rate (scfm): 2,217,000

Exhaust Temperature (°F): 205

Discharge Style: Unobstructed vertical

Authority for Requirement: DNR Construction Permit 78-A-019-P17

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

#### **Monitoring Requirements**

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

#### **Compliance Demonstration Table**

Pollutant	Compliance Methodology <sup>(1)</sup>	Frequency	Test Run Time	Test Method
PM – Federal	CEMS (2), (3)	Continuous	1 hour	40 CFR 60, Appendix A, Method 5
Opacity	COMS (4)	Continuous	1 hour	40 CFR 60, Appendix A, Method 9
$SO_2$	CEMS (5)	Continuous	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>x</sub>	CEMS (5)	Continuous	1 hour	40 CFR 60, Appendix A, Method 7E
СО	CEMS (4)	Continuous	1 hour	40 CFR 60, Appendix A, Method 10
$CO_2$	CEMS (4)	Continuous	1 hour	40 CFR 60, Appendix A, Method 3

<sup>1)</sup> CEMS = Continuous Emission Monitoring System and COMS = Continuous Opacity Monitoring System.

As required by the Consent Decree, the owner or operator shall operate a PM CEMS and record the output of the system to demonstrate compliance with the Consent Decree limits. The PM CEMS data may be used to demonstrate compliance with other particulate matter emission limits.

See CEMS requirements A.(*Flowmeter*) below for PM CEMS installation, operation, maintenance, QA/QC protocol, and all other PM CEMS monitoring requirements.

<sup>4)</sup> See requirements below for all CEMS and COMS requirements.

See continuous emission monitoring requirements below for non-Consent Decree emission limits. See continuous emission monitoring requirements for Consent Decree emission limits.

#### **Continuous Emissions Monitoring System (CEMS):**

The following continuous monitoring system requirements apply to this emission point and its associated emission unit(s) and control equipment for all non-Consent Decree emission limits:

#### A. The following monitoring systems are required:

#### • Opacity:

In accordance with 40 CFR §60.45(a), the owner or operator shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere except as provided under 40 CFR §60.45(b).

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1).

Per 40 CFR §60.45(b)(5), the owner or operator may petition the Administrator (in writing) to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.

#### • *SO*<sub>2</sub>:

In accordance with 40 CFR §60.45(a), the owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) and record the output of the system, for measuring sulfur dioxide (SO<sub>2</sub>) emissions, except as provided by 40 CFR §60.45(b).

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a notice to the Department with the dates of the annual relative accuracy test audit.

This monitor shall also be used to demonstrate compliance with the non-NSPS emission standards in this permit.

#### • *NO<sub>x</sub>*:

In accordance with 40 CFR  $\S60.45(a)$ , the owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) and record the output of the system, for measuring nitrogen oxide (NO<sub>x</sub>) emissions, except as provided by 40 CFR  $\S60.45(b)$ .

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a notice to the Department with the dates of the annual relative accuracy test audit.

This monitor shall also be used to demonstrate compliance with the non-NSPS emission standards in this permit.

#### • O2 or CO2:

In accordance with 40 CFR §60.45(a), the owner or operator shall install, calibrate, maintain, and operate a CEMS and record the output of the system, for measuring the oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gases at each location where SO<sub>2</sub> or NO<sub>x</sub> emissions are monitored.

#### • *CO*:

Compliance with the carbon monoxide (CO) emission limits of this permit shall be continuously demonstrated by the owner or operator through the use of a CEMS. Therefore, the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring CO emissions discharged to the atmosphere and record the output of the system.

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 4A (PS4A) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a notice to the Department with the dates of the annual relative accuracy test audit.

#### • Wattmeter:

The owner or operator shall install, calibrate, maintain, and operate a wattmeter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor for demonstrating compliance with the output-based standard listed in the Emission Limits section above.

#### • Flowmeter:

The owner or operator shall install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of 40 CFR 60, Appendix B, Performance Specification 6 and 40 CFR 60, Appendix F, Procedure 1. In addition, the owner or operator shall record the output of the system, for measuring the volumetric flow of exhaust gases discharged to the atmosphere or

Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20(c) and 40 CFR 75, Appendix A, and continuing to meet the applicable quality control and quality assurance requirements of 40 CFR §75.21 and 40 CFR 75, Appendix B, may be used.

#### • Particulate Matter:

As required by Consent Decree Paragraph 150, the owner or operator shall install, correlate, maintain, and operate a particulate matter continuous emission monitoring system (PM CEMS). The following requirements shall apply:

- (a) As required by Consent Decree Paragraph 150, each PM CEMS shall:
  - i. Comprise a continuous particle mass monitoring measuring filterable particulate matter concentration (directly or indirectly) on an hourly average

- basis and a diluent monitor used to convert the concentration to units expressed in lb/MMBTU.
- ii. Be appropriate for the anticipated stack conditions and capable of measuring filterable PM concentrations on an hourly average basis and the owner or operator shall maintain an electronic database that stores the hourly average emission values (in lb/MMBTU) of all PM CEMS data for at least five (5) years.
- iii. Operate at all times the unit it serves is operating except for periods of monitor malfunction, maintenance, or repair.
- (b) As required by Consent Decree Paragraph 153, the owner or operator shall:
  - i. Use criteria set forth in 40 CFR 60, Appendix B, Performance Specification 11 (PS11) and 40 CFR 60, Appendix F, Procedure 2. The specifications of 40 CFR 60, Appendix F (QA/QC) shall apply.
  - ii. Conduct relative correlation audits no less frequently than once every three (3) calendar years or twelve (12) operating quarters, whichever comes first, or earlier if the characteristics of the PM or gas change such that the PM CEMS measurement technology is no longer valid.
- (c) As required by Consent Decree Paragraph 153, the owner or operator may use the correlation method specified in 40 CFR §63.10010(i) [at the temperature specified in 40 CFR Part 60, Appendix A-3] for purposes of correlating the PM CEMS under the Consent Decree. Diluent capping (i.e., 5% CO<sub>2</sub>) will be applied to the PM rate data for any hours where the measured CO<sub>2</sub> concentration is less than 5% following the procedures in 40 CFR Part 75, Appendix F, Section 3.3.4.1.
- (d) As required by Consent Decree Paragraph 152, the owner or operator shall follow the Quality Assurance/Quality Control (QA/QC) protocol approved by EPA for each PM CEMS.
- (e) As required by Consent Decree Paragraph 154, the owner or operator shall:
  - i. Ensure compliance with the PM CEMS installation and correlation plans submitted to and approved by EPA in accordance with Consent Decree Paragraphs 151 and 152.
  - ii. Ensure performance specification tests on the PM CEMS are conducted.
- iii. Operate the PM CEMS in accordance with the approved plan and QA/QC protocol.
- (f) As required by Consent Decree Paragraph 148(c), the owner or operator shall conduct condensable PM testing each time a relative correlation audit is performed for the PM CEMS and stack sampling for filterable PM shall be performed pursuant to PS11. When PM stack tests are required, the owner or operator shall:
  - i. Conduct the PM stack test using EPA Method 5 (filterable portion only) or any alternate method approved by EPA under the terms of the Consent Decree.
  - ii. Conduct the condensable PM stack test using the reference methods and procedures set for in 40 CFR 51, Appendix M, Method 202.
- iii. Ensure:
  - Each stack test consists of three (3) separate runs performed under representative operating conditions not including SSM.
  - The sampling time for each run shall be at least sixty (60) minutes and the

- volume of each run shall be at least 0.85 dry standard cubic meters (30 dry standard cubic feet).
- The PM emission rate from the stack test results is calculated in accordance with 40 CFR §60.8(f).
- The results of each PM stack test is submitted to the appropriate regulatory agency (i.e. the Department or Linn County).
- B. The CEMS required in CEMS Condition A above for SO<sub>2</sub>, NO<sub>x</sub>, CO, and either O<sub>2</sub> or CO<sub>2</sub> shall be operated and the data recorded during all periods of operation including periods of startup, shutdown, malfunction or emergency conditions, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments.
- C. As required by Consent Decree Paragraph 127, the following requirements apply to the SO<sub>2</sub> CEMS for the Consent Decree emission standards in this permit:
  - (1) The owner or operator shall use SO<sub>2</sub> emission data obtained from a CEMS in accordance with the procedures of 40 CFR Part 75 for all thirty (30) day rolling average emission rates and all twelve (12) month rolling average emission rates.
  - (2) The SO<sub>2</sub> emissions data is not required to be bias adjusted and the missing data substituting procedures of 40 CFR Part 75 shall not apply.
  - (3) Diluent capping (i.e., 5% CO<sub>2</sub>) shall be applied to the SO<sub>2</sub> emission rate for any hours where the measured CO<sub>2</sub> concentration is less than 5% following the procedures in 40 CFR Part 75, Appendix F, Section 3.3.4.1.
- D. As required by Consent Decree Paragraph 103, the following requirements apply to the NO<sub>x</sub> CEMS for the Consent Decree emission standards in this permit:
  - (1) The owner or operator shall use NO<sub>x</sub> emission data obtained from a CEMS in accordance with the procedures of 40 CFR Part 75 for all thirty (30) day rolling average emission rates and all twelve (12) month rolling average emission rates.
  - (2) The  $NO_x$  emissions data is not required to be bias adjusted and the missing data substituting procedures of 40 CFR Part 75 shall not apply.
  - (3) Diluent capping (i.e., 5% CO<sub>2</sub>) shall be applied to the NO<sub>x</sub> emission rate for any hours where the measured CO<sub>2</sub> concentration is less than 5% following the procedures in 40 CFR Part 75, Appendix F, Section 3.3.4.1.
- E. The following data requirements shall apply to all CEMS for non-NSPS and non-Consent Decree emission standards in this permit:
  - (1) The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission unit except for CEM breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
  - (2) The 1-hour average SO<sub>2</sub>, NO<sub>x</sub>, CO, and CO<sub>2</sub> emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least 2 data points must be used to calculate each 1-hour average.
  - (3) For each hour of missing emission data (NO<sub>x</sub>, SO<sub>2</sub>, CO, or CO<sub>2</sub>), the owner or operator shall substitute data by:
    - (a) For SO<sub>2</sub>, CO (lb/hr and ton/yr), and CO<sub>2</sub>:
      - (i) If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
        - 1. For a missing data period less than or equal to 24 hours, substitute the

- average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- 2. For a missing data period greater than 24 hours, substitute the greater of:
  - The 90<sup>th</sup> percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
  - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- (ii) If the monitor data availability is at least 90.0% but less than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
  - 1. For a missing data period of less than or equal to eight (8) hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
  - 2. For the missing data period of more than eight (8) hours, substitute the greater of:
    - The 95<sup>th</sup> percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
    - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- (iii) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

#### (b) For NO<sub>x</sub>:

- (i) If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
  - 1. For a missing data period less than or equal to 24 hours, substitute the arithmetic average recorded by a monitoring system during the previous 2,160 quality assured monitor operating hours at the corresponding unit load range or operational bin as determined using the procedure outlined in Condition E above .
  - 2. For a missing data period greater than 24 hours, substitute the greater of:
    - The 90<sup>th</sup> percentile emission rate recorded by a monitoring system during the previous 2,160 quality assured monitor operating hours at the corresponding unit load range or operational bin as determined using the procedure outline in Condition E above; or
    - The average of the hourly emission rates recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- (ii) If the monitor data availability is at least 90.0% but less than 95.0%, the

owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:

- 1. For a missing data period of less than or equal to eight (8) hours, substitute the average emission rate recorded by the monitoring system during the previous 2,160 quality assured monitor operating hours at the corresponding unit load range or operational bin as determined using the procedure outlined in Condition E above .
- 2. For the missing data period of more than eight (8) hours, substitute the greater of:
  - The 95<sup>th</sup> percentile hourly emission rate recorded by a monitoring system during the previous 2,160 quality assured monitor operating hours at the corresponding unit load range or operational bin as determined using the procedure outlined in Condition E above; or
  - The average of the hourly emission rates recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- (iii) If no quality assured emission rate data exist at either the corresponding load range (or a higher load range) or at the corresponding operational bin, the owner or operator shall substitute using the average of the hourly emission rates recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- (iv) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.
- F. If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.
  - (1) The owner or operator shall establish ten (10) operating load ranges defined in terms of percent of the maximum hourly average gross load of the unit [in gross megawatts (MW<sub>ge</sub>)] as shown in the table below (Do not use integrated hourly gross load in MW-hr):

Operating Load Range	Percent of maximum hourly gross load or maximum hourly gross steam load (%)
1	0 - 10
2	> 10 – 20
3	> 20 – 30
4	> 30 – 40
5	> 40 – 50
6	> 50 - 60
7	> 60 – 70
8	> 70 - 80
9	> 80 – 90
10	> 90

- (2) Beginning with the first hour of unit operation after the installation and certification of the NO<sub>x</sub> CEMS, for each hour of unit operation record a number one (1) through ten (10) that identifies the operating load range corresponding to the integrated hourly gross load of the emission unit recorded for each unit operating hour.
- (3) Beginning with the first hour of unit operation after the installation and certification of the NO<sub>x</sub> CEMS and continuing thereafter, the data acquisition and handling system must be capable of calculating and recording the following information for each unit operating hour of missing NO<sub>x</sub> data within each identified load range during the shorter of the previous 2,160 quality assured monitor operating hours (on a rolling basis) or all previous quality assured operating hours:
  - The average of the hourly NO<sub>x</sub> emission rates (in lb/MMBTU) reported by the NO<sub>x</sub> CEMS.
  - The 90<sup>th</sup> percentile value of hourly NO<sub>x</sub> emission rates (in lb/ MMBTU).
  - The 95<sup>th</sup> percentile value of hourly NO<sub>x</sub> emission rates (in lb/ MMBTU).
  - The maximum value of the hourly NO<sub>x</sub> emission rates (in lb/ MMBTU).
- (4) Calculate all NO<sub>x</sub> CEMS data averages, maximum values, and percentile values determined by this procedure using bias adjusted values in the load ranges.
- (5) When a bias adjustment is necessary for the  $NO_x$  CEMS, apply the adjustment factor to all  $NO_x$  CEMS data values placed in the load ranges.

Authority for Requirement - DNR Construction Permit 78-A-019-P15 Consent Decree Civil Action No.: C15-0061 567 IAC 23.1(2)"a" 40 CFR 60 Subpart D

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 24.108(3)

See Appendix B: System-wide Consent Decree Requirements for IPL Facilities in Iowa

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

#### Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
2-6	Coal Pile, Open Storage Area	Coal	30.3 acres	NA

#### **Applicable Requirements**

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

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

Pollutant: 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 24.108(3)

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

#### Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
3-59	West Rotary Car Dump	CE 3-4: Baghouse	Coal	3,500 tons/hr	78-A-096-S2

#### **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 20% (1)

Authority for Requirement: DNR Construction Permit 78-A-096-S2

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 15.0 lb/hr

Authority for Requirement: DNR Construction Permit 78-A-096-S2

Pollutant: Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 15.0 lb/hr

Authority for Requirement: DNR Construction Permit 78-A-096-S2

567 IAC 23.3(2)"a"

#### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The permittee shall operate the baghouse in accordance with the recommendations of the manufacturer.
- B. The permittee shall maintain records on the maintenance work performed on the baghouse.

Authority for Requirement: DNR Construction Permit 78-A-096-S2

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

#### **Federal Standards**

New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
EU 3-59	A	General Provisions	N/A	23.1(2)	§60.1 – §60.19
	Y	Standards of Performance for Coal Preparation and Processing Plants	N/A	23.1(2)"v"	§60.250 - §60.258

Authority for Requirement: DNR Construction Permit 78-A-096-S2

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 60

Stack Opening (inches, dia): 60 Exhaust Temperature (°F): Ambient Exhaust Flowrate (scfm): 74,500 Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 78-A-096-S2

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

#### **Monitoring Requirements**

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

#### **Stack Testing:**

Pollutant –PM & PM<sub>10</sub>

Stack Test to be Completed by (date) – Within 2 year of permit issuance.

Test Methods: 40 CFR 60, Appendix A, Method 5 (PM)

40 CFR 51 Appendix M Method 202 (PM)

40 CFR 51, Appendix M, 201A with 202 (PM<sub>10</sub>)

Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in DW 31 98-TV-009R3, \*\*DATE\*\*

the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

#### **Opacity Monitoring:**

Visible emissions shall be observed on a weekly basis to ensure that none occurs when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity of greater than 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 observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🔀
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required? (1) Compliance Assurance Monitoring (CAM) Plan is for EU 3-59 and EU 4 requirements of CAM plan for this equipment are PM <sub>10</sub> .	Yes No Care No

Authority for Requirement: 567 IAC 24.108(3)

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

#### Associated Equipment

Emission	<b>Emission Unit</b>	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
4-59	East Rotary Car Dumper	CE 3-4: Baghouse	Coal	3,500 tons/hr	78-A-097-S3

#### **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 20% (1)

Authority for Requirement: DNR Construction Permit 78-A-097-S3

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 10.0 lb/hr

Authority for Requirement: DNR Construction Permit 78-A-097-S3

Pollutant: Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 10.0 lb/hr

Authority for Requirement: DNR Construction Permit 78-A-097-S3

567 IAC 23.3(2)"a"

#### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The permittee shall operate the baghouse in accordance with the recommendations of the manufacturer.
- B. The permittee shall maintain records on the maintenance work performed on the baghouse.

Authority for Requirement: DNR Construction Permit 78-A-097-S3

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

#### **Federal Standards**

#### New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
EU 4-59	A	General Provisions	N/A	23.1(2)	§60.1 – §60.19
	Y	Standards of Performance for Coal Preparation and Processing Plants	N/A	23.1(2)"v"	§60.250 - §60.258

Authority for Requirement: DNR Construction Permit 78-A-097-S3

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 60

Stack Opening (inches, dia): 60 Exhaust Temperature (°F): Ambient Exhaust Flowrate (scfm): 74,500 Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 78-A-097-S3

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

#### **Monitoring Requirements**

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

#### **Stack Testing:**

Pollutant –PM & PM<sub>10</sub>

Stack Test to be Completed by (date) – Within 2 year of permit issuance.

Test Methods: 40 CFR 60, Appendix A, Method 5 (PM)

40 CFR 51 Appendix M Method 202 (PM)

40 CFR 51, Appendix M, 201A with 202 (PM<sub>10</sub>)

Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in

the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

#### **Opacity Monitoring:**

Visible emissions shall be observed on a weekly basis to ensure that none occurs when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity of greater than 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 observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required? Compliance Assurance Monitoring (CAM) Plan is for EU 3-59 and EU 4-requirements of CAM plan for this equipment are PM <sub>10</sub> .	Yes ⊠ No ☐ 59 combined. Relevant

Authority for Requirement: 567 IAC 24.108(3)

#### Compliance Assurance Monitoring (CAM) Plan for EU 3-59 & EU 4-59

#### I. <u>Background</u>

#### A. Emissions Unit

Facility: IPL – Ottumwa Generating Station

Description: West Rotary Car Dumper & East Rotary Car Dumper

Identification: EU 3-59 & EU 4-59

#### B. Control Equipment

Description: Baghouse (used by EU 3-59 & EU 4-59)

Identification: CE 3-4

#### C. Applicable Regulation and Emission Limit

Regulation No.: DNR Construction Permit 78-A-096-S2 & 78-A-097-S3

PM Emission limit: 15.0 lb/hr & 10.0 lb/hr PM<sub>10</sub> Emission Limit: 15.0 lb/hr & 10.0 lb/hr

#### II. Monitoring Approach

#### A. Indicator

Pressure drop across the filter bags is the indicator of the performance of the baghouse.

#### B. Indicator Range

Normal operating pressure drop range is between 0.1 and 8 inches of water. An excursion is triggered when the pressure drop across the filter bags is outside the normal operating range for a period of more than five (5) minutes.

#### C. Measurement Approach

Pressure drop shall be checked daily to ensure that the baghouse is operating inside the normal operating pressure drop range.

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

The QIP threshold is triggered when total number of excursions exceeds ten (10) times during a semi-annual reporting period (January 1 to June 30, or July 1 to December 31). A deviation shall be reported in the semi-annual report when the QIP threshold is triggered.

#### E. Performance Criteria

Data representativeness: Pressure drop of less than 0.1 or more than 8

inches of water would indicate a decrease in the performance of the baghouse and potentially indicate an increase of particulate emissions.

Verification of operational status: Records of pressure drop readings will be

maintained for five years.

QA/QC practices and criteria: The facility shall check the pressure drop daily

when the baghouse is in operation. If a pressure drop of less than 0.1 or more than 8 inches of water for more than five (5) minutes is observed, corrective action will be taken within 8 hours.

Monitoring frequency and data

Collection procedure: Pressure drop readings shall be conducted daily

during a period when the baghouse is in operation. Records of the readings shall be

maintained for five years.

### III. Routine Maintenance

## A. Weekly Monitoring and Corrective Actions

- Inspect the compressed air pulsing system for any abnormal conditions.
- Inspect the screw conveyor, rotary airlock, reducer, and drive motor for signs of jamming, leakage, wear or broken parts.

If there is a problem with any of this equipment, corrective actions will be taken to diagnose the problem and make repairs.

### B. Annual Inspections during Planned Unit Outages

- Thoroughly inspect bags for leaks and wear. Bag removal is not required during this inspection.
- Inspect the compressed air pulsing system for loose connections, air leaks, and excessive wear.
- Inspect and lubricate the screw conveyor, rotary airlock, reducer, and drive motor according to the manufacturer's service bulletins.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and access doors.

The appropriate measures and/or action plan for remediation will be implemented to assure the control equipment will operate properly before the end of the unit outage period.

# C. Recordkeeping

Records of all weekly inspections and any actions resulting from these inspections and records of all planned unit outage inspections and any actions resulting from these inspections will be kept for five (5) years.

## D. Quality Control

- All instruments and equipment will be calibrated, maintained, and operated according to the manufacturer's recommendations.
- An inventory of spare parts will be maintained. Parts will be re-ordered as they are used.

Authority for Requirement: 567 IAC 24.108(3)

40 CFR 64

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

## Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
8-60	Coal Conveying Transfer House	CE 3: Pulse Jet Baghouse	Coal	3,500 tons/hr	07-A-1357-P

# **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: 10% (1), 20%

Authority for Requirement: DNR Construction Permit 07-A-1357-P

40 CFR 60, Subpart Y 567 IAC 23.1(2)"v"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 2.79 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1357-P

Pollutant: Particulate Matter (PM) - Federal

Emission Limit: 0.013 gr/dscf (1)

Authority for Requirement: DNR Construction Permit 07-A-1357-P

(1) BACT Emission Limit

## Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits at this time.

## **NSPS Applicability**

This emission unit is subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Y (Standards of Performance for Coal Preparation Plants, 40 CFR §60.250 – 40 CFR §60.254) of the New Source Performance Standards (NSPS).

Authority for Requirement: DNR Construction Permit 07-A-1357-P

40 CFR 60, Subpart A & Subpart Y

567 IAC 23.1(2)"v"

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 76

Stack Opening (inches, dia): 36 Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 25,000

Discharge Style: Unobstructed Vertical

Authority for Requirement: DNR Construction Permit 07-A-1357-P

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

## **Monitoring Requirements**

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

## **Stack Testing:**

Pollutant –PM & PM<sub>10</sub>

Stack Test to be Completed by (date) – Within 2 year of permit issuance.

Test Methods: 40 CFR 60, Appendix A, Method 5 (PM)

40 CFR 51 Appendix M Method 202 (PM)

40 CFR 51, Appendix M, 201A with 202 (PM<sub>10</sub>)

Authority for Requirement – 567 IAC 24.108(3)

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

### **Opacity Monitoring:**

Visible emissions shall be observed on a weekly basis to ensure that none occurs when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity of greater than 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 observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required? Relevant requirements of CAM plan for this equipment: PM <sub>10</sub>	Yes 🛛 No 🗌

Authority for Requirement: 567 IAC 24.108(3)

### Compliance Assurance Monitoring (CAM) Plan for EU 8-60

### I. <u>Background</u>

### A. Emissions Unit

Facility: IPL – Ottumwa Generating Station
Description: Coal Conveying Transfer House

Identification: EU 8-60

## B. Control Equipment

Description: Baghouse Identification: CE3

### C. Applicable Regulation and Emission Limit

Regulation No.: DNR Construction Permit 07-A-1357-P

PM<sub>10</sub> Emission Limit: 2.79 lb/hr

### II. Monitoring Approach

#### A. Indicator

Pressure drop across the filter bags is the indicator of the performance of the baghouse.

### B. Indicator Range

Normal operating pressure drop range is between 2 and 10 inches of water. An excursion is triggered when the pressure drop across the filter bags is outside the normal operating range for a period of more than five (5) minutes.

### C. Measurement Approach

Pressure drop shall be checked daily to ensure that the baghouse is operating inside the normal operating pressure drop range.

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

The QIP threshold is triggered when total number of excursions exceeds ten (10) times during a semi-annual reporting period (January 1 to June 30, or July 1 to December 31). A deviation shall be reported in the semi-annual report when the QIP threshold is triggered.

### E. Performance Criteria

Data representativeness: Pressure drop of less than 2 and 10 inches of

water would indicate a decrease in the

performance of the baghouse and potentially indicate an increase of particulate emissions.

Verification of operational status: Records of pressure drop readings will be

maintained for five years.

QA/QC practices and criteria: The facility shall check the pressure drop daily

when the baghouse is in operation. If a pressure drop of less than 2 and 10 inches of water for more than five (5) minutes is observed, corrective

action will be taken within 8 hours.

Monitoring frequency and data

Collection procedure: Pressure drop readings shall be conducted daily

during a period when the baghouse is in operation. Records of the readings shall be

maintained for five years.

### III. Routine Maintenance

## A. Weekly Monitoring and Corrective Actions

- Inspect the compressed air pulsing system for any abnormal conditions.
- Inspect the screw conveyor, rotary airlock, reducer, and drive motor for signs of jamming, leakage, wear or broken parts.

If there is a problem with any of this equipment, corrective actions will be taken to diagnose the problem and make repairs.

### B. Annual Inspections during Planned Unit Outages

- Thoroughly inspect bags for leaks and wear. Bag removal is not required during this inspection.
- Inspect the compressed air pulsing system for loose connections, air leaks, and excessive wear.
- Inspect and lubricate the screw conveyor, rotary airlock, reducer, and drive motor according to the manufacturer's service bulletins.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and access doors.

The appropriate measures and/or action plan for remediation will be implemented to assure the control equipment will operate properly before the end of the unit outage period.

### C. Recordkeeping

Records of all weekly inspections and any actions resulting from these inspections and records of all planned unit outage inspections and any actions resulting from these inspections will be kept for five (5) years.

## D. Quality Control

- All instruments and equipment will be calibrated, maintained, and operated according to the manufacturer's recommendations.
- An inventory of spare parts will be maintained. Parts will be re-ordered as they are used.

Authority for Requirement: 567 IAC 24.108(3)

40 CFR 64

# **Emission Point ID Number: 10**

### <u>Associated Equipment</u>

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
10-61	Coal Crusher House	CE 4: Baghouse	Coal	1,100 tons/hr	10-A-329-P2

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 20%

Authority for Requirement: DNR Construction Permit 10-A-329-P2

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM<sub>2.5</sub>)

Emission Limit: 3.24 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-329-P2

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 4.0 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-329-P2

Pollutant: Particulate Matter (PM) - State

Emission Limit: 4.0 lb/hr.

Authority for Requirement: DNR Construction Permit 10-A-329-P2

### **BACT Emission Limits**

Pollutant: Opacity Emission Limit: 10%

Authority for Requirement: DNR Construction Permit 10-A-329-P2

Pollutant: Particulate Matter (PM) - Federal

Emission Limit: 0.013 gr/dscf

Authority for Requirement: DNR Construction Permit 10-A-329-P2

### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subparts A [§60.1 §60.19] and Y [§60.250 §60.258].
- B. The owner or operator shall maintain a pressure drop across the baghouse (CE-4) between 0.1 and 8.0 inches of water column.
  - i. The owner or operator shall record the baghouse (CE-4) pressure drop, in inches water column, at a minimum of once per day. This requirement does not apply when the Coal Crusher House (EU 10-61) is not in operation.
  - ii. The owner or operator shall install a pressure drop monitoring device that shall be operated and maintained according to the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
  - iii. If the pressure drops deviates below the minimum required, the owner or operator shall record the time, date, and actions taken to correct the situation. The owner or operator shall also record when the pressure drop has returned to or above the minimum pressure drop required.
- C. The owner or operator shall inspect and maintain the baghouse (CE-4) according to the manufacturer's specifications and instructions and/or the facility's (Plant No. 90-07-001) operation and maintenance plan.
  - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse (CE-40. At a minimum, this log shall include:
    - 1. The date that any inspection and/or maintenance was performed on the baghouse;
    - 2. Any issues identified during the inspection;
    - 3. Any issues addressed during the maintenance activities and the date each issue was resolved; and
    - 4. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 10-A-329-P2

40 CFR 60, Subpart Y 567 IAC 23.1(2)"v"

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 90

Stack Opening (inches, dia.): 50 Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 40,000

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 10-A-329-P2

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

## **Monitoring Requirements**

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

## **Opacity Monitoring:**

Visible emissions shall be observed on a weekly basis to ensure that none occurs when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity of greater than 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 observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

Agency Approved Operation & Maintenance Plan Required?	Yes ∐ No ⊠
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required? Relevant requirements of CAM plan for this equipment: PM <sub>10</sub> , PM	Yes ⊠ No □

Authority for Requirement: 567 IAC 24.108(3)

## **Compliance Assurance Monitoring (CAM) Plan for EU 10-61**

## I. Background

## A. Emissions Unit

Facility: IPL – Ottumwa Generating Station

Description: Coal Crusher House

Identification: EU 10-61

### B. Control Equipment

Description: Baghouse Identification: CE4

## C. Applicable Regulation and Emission Limit

Regulation No.: DNR Construction Permit 10-A-329-P2

PM<sub>10</sub> Emission Limit: 4.0 lb/hr PM<sub>2.5</sub> Emission Limit: 3.24 lb/hr

### II. Monitoring Approach

#### A. Indicator

Pressure drop across the filter bags is the indicator of the performance of the baghouse.

### B. Indicator Range

Normal operating pressure drop range is between 0.1 and 8.0 inches of water. An excursion is triggered when the pressure drop across the filter bags is outside the normal operating range for a period of more than five (5) minutes.

## C. Measurement Approach

Pressure drop shall be checked daily to ensure that the baghouse is operating inside the normal operating pressure drop range.

## D. QIP (Quality Improvement Plan) Threshold

The QIP threshold is triggered when total number of excursions exceeds ten (10) times during a semi-annual reporting period (January 1 to June 30, or July 1 to December 31). A deviation shall be reported in the semi-annual report when the QIP threshold is triggered.

E. Performance Criteria

Data representativeness: Pressure drop of less than 0.1 or more than 8.0

inches of water would indicate a decrease in the performance of the baghouse and potentially indicate an increase of particulate emissions.

Verification of operational status: Records of pressure drop readings will be

maintained for five years.

QA/QC practices and criteria: The facility shall check the pressure drop daily

when the baghouse is in operation. If a pressure drop of less than 0.1 or more than 8.0 inches of water for more than five (5) minutes is observed, corrective action will be taken within 8 hours.

Monitoring frequency and data

Collection procedure: Pressure drop readings shall be conducted daily

during a period when the baghouse is in operation. Records of the readings shall be

maintained for five years.

#### III. Routine Maintenance

## A. Weekly Monitoring and Corrective Actions

- Inspect the compressed air pulsing system for any abnormal conditions.
- Inspect the screw conveyor, rotary airlock, reducer, and drive motor for signs of jamming, leakage, wear or broken parts.

If there is a problem with any of this equipment, corrective actions will be taken to diagnose the problem and make repairs.

### B. Annual Inspections During Planned Unit Outages

- Thoroughly inspect bags for leaks and wear. Bag removal is not required during this inspection.
- Inspect the compressed air pulsing system for loose connections, air leaks, and excessive wear.
- Inspect and lubricate the screw conveyor, rotary airlock, reducer, and drive motor according to the manufacturer's service bulletins.
- Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and access doors.

The appropriate measures and/or action plan for remediation will be implemented to assure the control equipment will operate properly before the end of the unit outage period.

### C. Recordkeeping

Records of all weekly inspections and any actions resulting from these inspections and records of all planned unit outage inspections and any actions resulting from these inspections will be kept for five (5) years.

# D. Quality Control

- All instruments and equipment will be calibrated, maintained, and operated according to the manufacturer's recommendations.
- An inventory of spare parts will be maintained. Parts will be re-ordered as they are used.

Authority for Requirement: 567 IAC 24.108(3)

40 CFR 64

### **Emission Point ID Number: 11 & 12**

# **Associated Equipment**

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
11-15	Coal Pile Stacker/Reclaimer	Coal	3,500 tons/hr	NA
12-14	Emergency Conveyer to Coal Pile	Coal	3,500 tons/hr	NA

# **Applicable Requirements**

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

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

Pollutant: 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 24.108(3)

### **Emission Point ID Number: 38**

# **Associated Equipment**

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
38-56	Two (2) Lime Silos	CE 10: Baghouse	Lime	30 tons/hr	99-A-174-S4

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 40% (1)

Authority for Requirement: DNR Construction Permit 99-A-174-S4

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM) Emission Limit: 0.30 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 99-A-174-S4

567 IAC 23.3(2)"a"

### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall operate and maintain the control equipment according to the manufacturer's specifications and maintenance schedule. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
  - a. The date and time any inspection and/or maintenance was performed on the control equipment;
  - b. Any issues identified during the inspection and the date each issue was resolved; and.
  - c. Any issues identified during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR Construction Permit 99-A-174-S4

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

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 71 Stack Opening (inches): 4 x 5.125 Exhaust Temperature (°F): 68 Exhaust Flowrate (scfm): 900 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 99-A-174-S4

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

# **Monitoring Requirements**

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

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

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Authority for Requirement: 567 IAC 24.108(3)

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**Emission Point ID Number: 56 & 57** 

# **Associated Equipment**

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EP-56	56-100	#2 Fuel Oil Tank West, Vertical Fixed Roof	#2 Fuel Oil	846,000 gallons	NA
EP-57	57-101	#2 Fuel Oil Tank East, Vertical Fixed Roof	#2 Fuel Oil	846,000 gallons	NA

# **Applicable Requirements**

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

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

There are no emission limits at this time.

## Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits at this time.

## **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 24.108(3)

### **Emission Point ID Number: 67**

# Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
67-34	Boiler for Plant Heat	#1 and #2 Fuel Oil	553 gal/hr (77.413 MMBtu/hr)	04-A-816-S5

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 40% (1)

Authority for Requirement: DNR Construction Permit 04-A-816-S5

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 2.0 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-816-S5

Pollutant: State Particulate Matter (PM)

Emission Limit: 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 04-A-816-S5

567 IAC 23.3(2)"b"(2)

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 04-A-816-S5

567 IAC 23.3(3)

### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The Heating Boiler (EU 67-34) shall use only Number 1 or Number 2 fuel oil. The owner or operator shall keep a record of the types of fuel used in the Heating Boiler (EU 67-34).
- B. The sulfur content of the fuel oil used shall not exceed 0.1 percent by weight. The owner or operator shall perform an analysis of the sulfur content of each shipment of fuel oil received. Alternatively, the owner or operator shall have the oil supplier provide an analysis on the sulfur content of the fuel oil received. If the supplier provides the analysis, it does not have to be for each shipment of fuel oil received, but shall be

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

- documented by receipts from the fuel supplier, a statement from the fuel supplier on the specification of the sulfur content of the purchased fuel oil, or other supporting documentation.
- C. The amount of fuel oil combusted in the boiler shall not exceed 484,428 gallons per rolling 12-month period. On a monthly basis, the owner or operator shall:
  - a. Record the amount of fuel oil used, in gallons, in the Heating Boiler (EU 67-34) during the previous month; and,
  - b. Calculated and record the total amount of fuel oil used, in gallons, in the Heating Boiler (EU 67-34) during the previous 12-month period.
- D. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart Dc [§60.40c §60.48c], including those not specifically mentioned in this permit.
- E. In accordance with §60.44c(h), compliance with the fuel oil sulfur limit shall be based on fuel supplier certification. The fuel supplier certification shall contain all the information required in §60.48c(f)(1):
  - a. The name of the oil supplier;
  - b. A statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in §60.41c; And,
  - c. The sulfur content or maximum sulfur content of the oil.
- F. Per 40 CFR §60.48c(g)(1), the owner or operator shall record and maintain records of the amount of each fuel combusted during each operating day. As an alternative to this requirement, the owner or operator may elect to:
  - a. Record and maintain records of the amount of each fuel combusted during each calendar month [40 CFR §60.48c(g)(2)]; or
  - b. Record and maintain records of the total amount of each steam generating unit fuel delivered to the property during each calendar month [40 CFR §60.48c(g)(3)].

Authority for Requirement: DNR Construction Permit 04-A-816-S5

40 CFR 60 Subpart Dc 567 IAC 23.1(2)"III"

### National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit, 67 - 34 is subject to the requirements of 40 CFR 63 of Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers, and the General Provisions of 40 CFR 63, Subpart A. Authority for Requirement: 40 CFR 63 Subpart DDDDD

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 219

Stack Opening (inches, dia): 48 Exhaust Temperature (°F): 400 Exhaust Flowrate (scfm): 4,300 Discharge Style: Vertical, Obstructed

Authority for Requirement: DNR Construction Permit 04-A-816-S5

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

# **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 24.108(3)

# **Emission Point ID Number: 69**

# **Associated Equipment**

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
69-31	NUVA Feeder Room (29 Fans)	Fly Ash	1.71 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 🖂
A 11 1 C D 1 C T 1 C C 1 (0)	

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Authority for Requirement: 567 IAC 24.108(3)

## **Emission Point ID Number: 71**

## Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
71-29	Welding Booth	Welding Wire/Rod	50 lbs/hr	04-A-817

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 40% (1)

Authority for Requirement: DNR Construction Permit 04-A-817

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.20 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-817

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-817

567 IAC 23.3(2)"a"

### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits at this time.

<sup>&</sup>lt;sup>(1)</sup>An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 15

Stack Opening (inches): 42 × 42 Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 14,200

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 04-A-817

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

# **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 24.108(3)

## **Emission Point ID Number: 72a**

# **Associated Equipment**

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
72-27	West Side Coal Silo	CE 72a: Baghouse	Coal	550 tons/hr	18-A-121-P

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 20%

Authority for Requirement: DNR Construction Permit 18-A-121-P

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 15.0 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-121-P

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-121-P

567 IAC 23.3(2)"a"

### **BACT Emission Limits**

Pollutant: Opacity Emission Limit: 10%

Authority for Requirement: DNR Construction Permit 18-A-121-P

Pollutant: Particulate Matter (PM) - Federal

Emission Limit: 0.013 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-121-P

# Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the control equipment per manufacturer's recommendations.
  - i. The owner/operator shall maintain records on the maintenance conducted on the

control equipment.

- B. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 18-073) the owner or operator shall document and maintain a record of the following:
  - i. A description of the project (Project Number 18-073),
  - ii. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 18-073), and
  - iii. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- C. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).

Authority for Requirement: DNR Construction Permit 18-A-121-P

### **Federal Standards**

New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
	A	General Provisions	N/A	23.1(2)	§60.1 – §60.19
72-27	Y	Standards of Performance for Coal Preparation and Processing Plants	N/A	23.1(2)"v"	§60.250 - §60.258

Authority for Requirement: DNR Construction Permit 18-A-121-P

567 IAC 23.1(2) "v" 40 CFR 60, Subpart Y

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 232

Stack Opening (inches, dia): 38 Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 31,490

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 18-A-121-P

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

## **Monitoring Requirements**

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

## **Stack Testing:**

Pollutant –PM & PM<sub>10</sub>

Stack Test to be Completed by (date) – Within 2 year of permit issuance.

Test Methods: 40 CFR 60, Appendix A, Method 5 (PM)

40 CFR 51 Appendix M Method 202 (PM)

40 CFR 51, Appendix M, 201A with 202 (PM<sub>10</sub>)

Authority for Requirement – 567 IAC 24.108(3)

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

### **Opacity Monitoring:**

Visible emissions shall be observed on a weekly basis to ensure that none occurs when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity of greater than 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 observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

Agency Approved Operation & Maintenance Plan Required?

Facility Maintained Operation & Maintenance Plan Required?

Yes □ No □

Compliance Assurance Monitoring (CAM) Plan Required?

Relevant requirements of CAM plan for this equipment: PM₁0

Authority for Requirement: 567 IAC 24.108(3)

### Compliance Assurance Monitoring (CAM) Plan for EU 72-27

## I. Background

### A. Emissions Unit

Facility: IPL – Ottumwa Generating Station

Description: West Side Coal Silo

Identification: EU 72-27

### B. Control Equipment

Description: Baghouse Identification: CE 72a

## C. Applicable Regulation and Emission Limit

Regulation No.: DNR Construction Permit 18-A-121-P

PM<sub>10</sub> Emission Limit: 15.0 lb/hr

### II. Monitoring Approach

#### A. Indicator

Pressure drop across the filter bags is the indicator of the performance of the baghouse.

### B. Indicator Range

Normal operating pressure drop range is between 2 and 10 inches of water. An excursion is triggered when the pressure drop across the filter bags is outside the normal operating range for a period of more than five (5) minutes.

### C. Measurement Approach

Pressure drop shall be checked daily to ensure that the baghouse is operating inside the normal operating pressure drop range.

## D. QIP (Quality Improvement Plan) Threshold

The QIP threshold is triggered when total number of excursions exceeds ten (10) times during a semi-annual reporting period (January 1 to June 30, or July 1 to December 31). A deviation shall be reported in the semi-annual report when the QIP threshold is triggered.

### E. Performance Criteria

Data representativeness: Pressure drop of less than 2 or more than 10

inches of water would indicate a decrease in the performance of the baghouse and potentially indicate an increase of particulate emissions.

Verification of operational status: Records of pressure drop readings will be

maintained for five years.

QA/QC practices and criteria: The facility shall check the pressure drop daily

when the baghouse is in operation. If a pressure drop of less than 2 or more than 10 inches of water for more than five (5) minutes is observed, corrective action will be taken within 8 hours.

Monitoring frequency and data

Collection procedure: Pressure drop readings shall be conducted daily

during a period when the baghouse is in operation. Records of the readings shall be

maintained for five years.

#### III. Routine Maintenance

# A. Weekly Monitoring and Corrective Actions

- \* Inspect the compressed air pulsing system for any abnormal conditions.
- \* Inspect the screw conveyor, rotary airlock, reducer, and drive motor for signs of jamming, leakage, wear or broken parts.

If there is a problem with any of this equipment, corrective actions will be taken to diagnose the problem and make repairs.

### B. Annual Inspections during Planned Unit Outages

- \* Thoroughly inspect bags for leaks and wear. Bag removal is not required during this inspection.
- \* Inspect the compressed air pulsing system for loose connections, air leaks, and excessive wear.

- \* Inspect and lubricate the screw conveyor, rotary airlock, reducer, and drive motor according to the manufacturer's service bulletins.
- \* Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and access doors.

The appropriate measures and/or action plan for remediation will be implemented to assure the control equipment will operate properly before the end of the unit outage period.

## C. Recordkeeping

Records of all weekly inspections and any actions resulting from these inspections and records of all planned unit outage inspections and any actions resulting from these inspections will be kept for five (5) years.

## D. Quality Control

- \* All instruments and equipment will be calibrated, maintained, and operated according to the manufacturer's recommendations.
- \* An inventory of spare parts will be maintained. Parts will be re-ordered as they are used.

Authority for Requirement: 567 IAC 24.108(3)

40 CFR 64

### **Emission Point ID Number: 73a**

# Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
73-28	East Side Coal Silo	CE 73a: Baghouse	Coal	550 tons/hr	18-A-122-P

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 20%

Authority for Requirement: DNR Construction Permit 18-A-122-P

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 20.0 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-122-P

Pollutant: Particulate Matter (State)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-122-P

567 IAC 23.3(2)"a"

### **BACT Emission Limits**

Pollutant: Opacity Emission Limit: 10%

Authority for Requirement: DNR Construction Permit 18-A-122-P

Pollutant: Particulate Matter (PM) - Federal

Emission Limit: 0.014 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-122-P

## Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the control equipment per manufacturer's recommendations.
  - i. The owner/operator shall maintain records on the maintenance conducted on the

control equipment.

- B. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 18-073) the owner or operator shall document and maintain a record of the following:
  - i. A description of the project (Project Number 18-073),
  - ii. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 18-073), and
  - iii. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- C. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Authority for Requirement: DNR Construction Permit 18-A-122-P

### **Federal Standards**

New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
	A	General Provisions	N/A	23.1(2)	§60.1 – §60.19
EU 73- 28	Y	Standards of Performance for Coal Preparation and Processing Plants	N/A	23.1(2)"v"	§60.250 - §60.258

Authority for Requirement: DNR Construction Permit 18-A-122-P

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 232

Stack Opening (inches, dia): 44 Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 40,955

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 18-A-122-P

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

## **Monitoring Requirements**

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

## **Stack Testing:**

Pollutant –PM & PM<sub>10</sub>

Stack Test to be Completed by (date) – Within 2 year of permit issuance.

Test Methods: 40 CFR 60, Appendix A, Method 5 (PM)

40 CFR 51 Appendix M Method 202 (PM)

40 CFR 51, Appendix M, 201A with 202 (PM<sub>10</sub>)

Authority for Requirement – 567 IAC 24.108(3)

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

### **Opacity Monitoring:**

Visible emissions shall be observed on a weekly basis to ensure that none occurs when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity of greater than 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 observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

Agency Approved Operation & Maintenance Plan Required?	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required? Relevant requirements of CAM plan for this equipment: PM <sub>10</sub>	Yes 🛛 No 🗌

Authority for Requirement: 567 IAC 24.108(3)

## Compliance Assurance Monitoring (CAM) Plan for EU 73-28

### I. <u>Background</u>

### A. Emissions Unit

Facility: IPL – Ottumwa Generating Station

Description: East Side Coal Silo

Identification: EU 73-28

### B. Control Equipment

Description: Baghouse Identification: CE 73a

### C. Applicable Regulation and Emission Limit

Regulation No.: DNR Construction Permit 18-A-122-P

PM<sub>10</sub> Emission Limit: 20.0 lb/hr

### II. Monitoring Approach

#### A. Indicator

Pressure drop across the filter bags is the indicator of the performance of the baghouse.

### B. Indicator Range

Normal operating pressure drop range is between 2 and 10 inches of water. An excursion is triggered when the pressure drop across the filter bags is outside the normal operating range for a period of more than five (5) minutes.

### C. Measurement Approach

Pressure drop shall be checked daily to ensure that the baghouse is operating inside the normal operating pressure drop range.

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

The QIP threshold is triggered when total number of excursions exceeds ten (10) times during a semi-annual reporting period (January 1 to June 30, or July 1 to December 31). A deviation shall be reported in the semi-annual report when the QIP threshold is triggered.

### E. Performance Criteria

Data representativeness: Pressure drop of less than 2 or more than 10

inches of water would indicate a decrease in the performance of the baghouse and potentially indicate an increase of particulate emissions.

Verification of operational status: Records of pressure drop readings will be

maintained for five years.

QA/QC practices and criteria: The facility shall check the pressure drop daily

when the baghouse is in operation. If a pressure drop of less than 2 or more than 10 inches of water for more than five (5) minutes is observed, corrective action will be taken within 8 hours.

Monitoring frequency and data

Collection procedure: Pressure drop readings shall be conducted daily

during a period when the baghouse is in operation. Records of the readings shall be

maintained for five years.

### III. Routine Maintenance

## A. Weekly Monitoring and Corrective Actions

\* Inspect the compressed air pulsing system for any abnormal conditions.

\* Inspect the screw conveyor, rotary airlock, reducer, and drive motor for signs of jamming, leakage, wear or broken parts.

If there is a problem with any of this equipment, corrective actions will be taken to diagnose the problem and make repairs.

# B. Annual Inspections during Planned Unit Outages

- \* Thoroughly inspect bags for leaks and wear. Bag removal is not required during this inspection.
- \* Inspect the compressed air pulsing system for loose connections, air leaks, and excessive wear.
- \* Inspect and lubricate the screw conveyor, rotary airlock, reducer, and drive motor according to the manufacturer's service bulletins.
- \* Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and access doors.

The appropriate measures and/or action plan for remediation will be implemented to assure the control equipment will operate properly before the end of the unit outage period.

### C. Recordkeeping

Records of all weekly inspections and any actions resulting from these inspections and records of all planned unit outage inspections and any actions resulting from these inspections will be kept for five (5) years.

### D. Quality Control

- \* All instruments and equipment will be calibrated, maintained, and operated according to the manufacturer's recommendations.
- \* An inventory of spare parts will be maintained. Parts will be re-ordered as they are used. Authority for Requirement: 567 IAC 24.108(3)

40 CFR 64

## **Emission Point ID Number: 75**

# Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
23	Parts Washer Main Building	Parts Washing Solvent	125 gallons	99-A-175-S2

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 40% (1)

Authority for Requirement: DNR Construction Permit 99-A-175-S2

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.257 lb/hr

Authority for Requirement: DNR Construction Permit 99-A-175-S2

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 99-A-175-S2

567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 0.50 tpy

Authority for Requirement: DNR Construction Permit 99-A-175-S2

# Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- 1. Maintain records demonstrating VOC emissions do not exceed 0.5 tons per twelve-month rolling total.
- 2. Maintain all MSDS sheets for materials used in the parts washer.

Authority for Requirement: DNR Construction Permit 99-A-175-S2

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

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 45

Stack Opening (inches, dia): 6 Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 300

Discharge Style: Vertical w/ Obstructing Rain Cap

Authority for Requirement: DNR Construction Permit 99-A-175-S2

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

# **Monitoring Requirements**

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

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

# Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
78-18	Cargill Coal Silo	CE8: Dust Collector	Coal	350 tons/hr	04-A-818

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 20%

Authority for Requirement: DNR Construction Permit 04-A-818

567 IAC 23.1(2)"v" 40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.20 lb/hr

Authority for Requirement: DNR Construction Permit 04-A-818

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 04-A-818

567 IAC 23.3(2)"a"

#### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

#### **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

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 79

Stack Opening (inches):  $6 \times 11$ Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 1,034

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 04-A-818

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

# **Monitoring Requirements**

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

Agency Approved Operation & Maintenance Plan Required? Relevant requirements of O & M plan for this equipment: Particulate Mat	Yes No L
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 24.108(3)	

# AGENCY OPERATION & MAINTENANCE PLAN BAGHOUSE FOR PARTICULATE CONTROL

Facility: IPL - Ottumwa Generating Station

EIQ Number: 92-2774

Emission Unit: EU 78-18 Coal Handling System

Emission Point: EP 78 Exhaust vents from Dust Control Baghouses

Control Equipment: CE8

#### **Monitoring Guidelines**

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with the emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, will propose a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

### **Monitoring Methods and Corrective Actions**

#### General

• Periodic Monitoring is not required when the source is not operated for time periods greater than one day.

### **Weekly Monitoring and Corrective Actions**

- \* Inspect the differential pressure across the bags. Confirm that the pressure is within the manufacturer's recommended operating range (2-10) inches of water).
- \* Inspect the compressed air pulsing system for any abnormal conditions.
- \* Inspect the drive motor for signs of jamming, leakage, wear or broken parts.
- \* Visible emissions shall be observed on a weekly basis to ensure that none occurs when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity of greater than 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 observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

# **Inspections During Planned Unit Outages (Annually)**

- \* Thoroughly inspect bags for leaks and wear. Bag removal is not required during this inspection.
- \* Inspect the compressed air pulsing system for loose connections, air leaks, and excessive wear.
- \* Inspect the drive motor according to the manufacturer's service bulletins.
- \* Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and access doors.

The appropriate measures and/or action plan for remediation will be implemented to assure the control equipment will operate properly before the end of the unit outage period.

# **Recordkeeping and Reporting**

- \* Records of all weekly inspections and any actions resulting from these inspections will be kept for five (5) years, including the differential pressure readings and the visual opacity observations.
- \* Records of all planned unit outage inspections and any actions resulting from these inspections will be kept for five (5) years.

### **Quality Control**

- \* All instruments and equipment will be calibrated, maintained, and operated according to the manufacturer's recommendations.
- \* An inventory of spare parts will be maintained. Parts will be re-ordered as they are used.

# Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
79-19	Cargill Silo Truck Loading Chute	Coal	700 tons/hr	NA

# **Applicable Requirements**

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

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

Pollutant: 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 🖂

# **Associated Equipment**

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
80-22	Fly Ash Silo Unloading Chute and C-Stone Production	Fly Ash	1,000 tons/hr	NA

# **Applicable Requirements**

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

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

Pollutant: 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 🖂

# **Associated Equipment**

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
92-48	Emergency Generator Combustion Turbine	Diesel Fuel	88.7 gallons/hr 1,200 hp	99-A-177-S1

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 40% (1)

Authority for Requirement: DNR Construction Permit 99-A-177-S1

567 IAC 23.3(2)"d"

Pollutant: State Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 99-A-177-S1

567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

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

Emission Limit: No fuel shall be combusted in this unit which exceeds 0.8 percent total sulfur by

weight (40 CFR 60.333(b)).

Authority for Requirement: DNR Construction Permit 99-A-177-S1

567 IAC 23.1(2)"aa" 40 CFR 60 Subpart GG

#### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

# **Operating Limits**

Operating limits for this emission unit shall be:

- A. The unit may be operated a maximum of 500 hours per twelve-month rolling period.
- B. The unit is limited to combusting a maximum of 44,350 gallons of diesel per twelvemonth rolling period.

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

C. Fuel combusted in the unit shall have a maximum sulfur content of 0.5 percent by weight.

# Reporting & Recordkeeping

- A. The owner or operator shall monitor and record the fuel sulfur content as required by 40 CFR 60.334(h) and (i).
- B. The owner or operator shall provide excess emission reports as required by 40 CFR 60.334(j).
- C. The owner or operator shall record the amount of fuel combusted, and update the twelvemonth rolling total monthly.
- D. The owner or operator shall record the hours of operation of this unit, and update the twelve-month rolling total monthly.

Authority for Requirement: DNR Construction Permit 99-A-177-S1

40 CFR 60, Subpart GG 567 IAC 23.1(2)"aa"

### **NSPS Applicability**

This unit is subject to the NSPS Subpart A, *General Provisions*, and Subpart GG, *Standards of Performance for Stationary Gas Turbines*, as a unit constructed after October 3, 1977 but prior to October 3, 1982.

Authority for Requirement: DNR Construction Permit 99-A-177-S1

40 CFR 60, Subpart GG 567 IAC 23.1(2)"aa"

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 65

Stack Opening (inches, dia): 24 Exhaust Temperature (°F): 900 Exhaust Flowrate (acfm): 29,700 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 99-A-177-S1

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

# **Monitoring Requirements**

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

 Agency Approved Operation & Maintenance Plan Required?
 Yes □ No ⋈

 Facility Maintained Operation & Maintenance Plan Required?
 Yes □ No ⋈

 Compliance Assurance Monitoring (CAM) Plan Required?
 Yes □ No ⋈

# **Associated Equipment**

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
100	Coal Pile Bulldozing	Coal	2 Bulldozers/hr	NA

# **Applicable Requirements**

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

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

Pollutant: 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 🖂
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# Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
Omt	Description	Equipment	Matchai	Capacity	1 CI IIII
200-1	Fly Ash Facility, West	CE200: Baghouse	Fly Ash	15 tons/hr	05-A-613

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 40% (1)

Authority for Requirement: DNR Construction Permit 05-A-613

567 IAC 23.1(2)"d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 1.0 lb/hr

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

DNR Construction Permit 05-A-613

Pollutant: Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-613

567 IAC 23.1(2)"a"

### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits at this time.

<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).

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 7

Stack Opening (inches): 20 x 48 Exhaust Temperature (°F): 150 Exhaust Flowrate (scfm): 20,000 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 05-A-613

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

# **Monitoring Requirements**

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

**Stack Testing:** One (1) representative test will be required for EP 200 and EP 201.

Pollutant –PM

Stack Test to be Completed by (date) – Within 2 year of permit issuance.

Test Methods: 40 CFR 60, Appendix A, Method 5

40 CFR 51 Appendix M Method 202

Authority for Requirement – 567 IAC 24.108(3)

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

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

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

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

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

# Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
200-2	Fly Ash Facility, East	CE201: Baghouse	Fly Ash	15 tons/hr	05-A-614

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 40% (1)

Authority for Requirement: DNR Construction Permit 05-A-614

567 IAC 23.1(2)"d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-614

567 IAC 23.3(2)"c"

Pollutant: Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-614

567 IAC 23.1(2)"a"

### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits at this time.

<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).

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 7 Stack Opening (inches, dia): 20 x 48 Exhaust Temperature (°F): 150 Exhaust Flowrate (scfm): 20,000 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 05-A-614

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

# **Monitoring Requirements**

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

**Stack Testing:** One (1) representative test will be require for EP 200 and EP 201.

Pollutant –PM

Stack Test to be Completed by (date) – Within 2 year of permit issuance.

Test Methods: 40 CFR 60, Appendix A, Method 5

40 CFR 51 Appendix M Method 202

Authority for Requirement – 567 IAC 24.108(3)

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

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

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

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

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

# **Emission Point ID Number: 202 (Internally Vented)**

# **Associated Equipment**

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
202	Fly Ash Facility Truck Loadout	Fly Ash	75 tons/hr	05-A-615-S1

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit: 40% (1)

Authority for Requirement: DNR Construction Permit 05-A-615-S1

567 IAC 23.1(2)"d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-615-S1

Pollutant: Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-615-S1

567 IAC 23.1(2)"a"

### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits at this time.

# **Monitoring Requirements**

DW

The owner/operator of this equipment shall comply with the monitoring <i>r</i> below.	requirements listed
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

# **Associated Equipment**

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
301	Dry Flue Gas Desulfurization (DFGD) By-Product Silo	CE301: Bin Vent Filter	DFGD By-Product	2,841 tons/hr	11-A-641-S1

# **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: No Visible Emissions

Authority for Requirement: DNR Construction Permit 11-A-641-S1

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>2.5</sub>)

Emission Limit: 0.07 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-641-S1

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.07 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-641-S1

Pollutant: State Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 0.07 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-641-S1

567 IAC 23.3(2)"a"

# Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

#### **Operating Limits**

Operating limits for this emission unit shall be:

- A. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-219) the owner or operator shall document:
  - (1) A description of the project (Project Number 11-219),
  - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-219), and
  - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions

(BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.

- B. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
  - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in condition A. (2), shown above. This excludes those pollutants that were major for the Prevention of Significant Deterioration (PSD) program and either went through a Best Available Control Technology (BACT) review or a "netting" analysis. Therefore, this requirement excludes NO<sub>x</sub>, CO, and greenhouse gases (GHG).
  - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.

### Reporting & Recordkeeping

- A. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in A of Operating Limits, shown above.
- B. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3 (18)"f"(5), the owner or operator shall maintain a record containing the information required in B of Operating Limits, shown above and that record shall be retained by the owner or operator for a period of five (5) years after the project (Project Number 11-219) is completed.
- C. Per 567 IAC 33.3(18)"f"(6), the owner or operator shall submit a report to the Department within sixty (60) days after the end of each year during which records must be generated under B of Reporting and Recordkeeping, shown above, setting out the unit's annual emissions during the calendar year that preceded submission of the report.

Authority for Requirement: DNR Construction Permit 11-A-641-S1

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 140.2

Stack Opening (inches): 8 x14 Exhaust Temperature (°F): 150 Exhaust Flowrate (scfm): 1,630 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 11-A-641-S1

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

#### **Monitoring Requirements**

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

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

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

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

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

# **Associated Equipment**

Emiss	on Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
306	Lime Silo	CE306: Bin Vent Filter	Lime	1,886 ton/hr	11-A-642-S1

# **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: No Visible Emissions

Authority for Requirement: DNR Construction Permit 11-A-642-S1

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>2.5</sub>)

Emission Limit: 0.07 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-642-S1

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.07 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-642-S1

Pollutant: State Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 0.07 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-642-S1

567 IAC 23.3(2)"a"

# Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

#### **Operating Limits**

Operating limits for this emission unit shall be:

- A. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-219) the owner or operator shall document:
  - (1) A description of the project (Project Number 11-219),
  - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-219), and
  - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded

under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.

- B. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
  - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Operating Limits A.(2), shown above. This excludes those pollutants that were major for the Prevention of Significant Deterioration (PSD) program and either went through a Best Available Control Technology (BACT) review or a "netting" analysis. Therefore, this requirement excludes NO<sub>x</sub>, CO, and greenhouse gases (GHG).
  - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.

# Reporting & Recordkeeping

- A. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in A. of Operating Limits, above.
- B. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3 (18)"f"(5), the owner or operator shall maintain a record containing the information required in B. of Operating Limits, shown above and that record shall be retained by the owner or operator for a period of five (5) years after the project (Project Number 11-219) is completed.
- C. Per 567 IAC 33.3(18)"f"(6), the owner or operator shall submit a report to the Department within sixty (60) days after the end of each year during which records must be generated under B, directly above, setting out the unit's annual emissions during the calendar year that preceded submission of the report.

Authority for Requirement: DNR Construction Permit 11-A-642-S1

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 128.5

Stack Opening (inches): 8 x 14 Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 1,550 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 11-A-642-S1

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

#### **Monitoring Requirements**

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

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

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

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

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

# Associated Equipment

Emission	Emission Unit Description	Control	Raw	Rated	Construction
Unit		Equipment	Material	Capacity	Permit
307	DFGD Recycle Product Silo	CE 307: Bin Vent Filter	DFGD Recycle Product	540 tons/hr	11-A-643-S1

# **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: No Visible Emissions

Authority for Requirement: DNR Construction Permit 11-A-643-S1

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>2.5</sub>)

Emission Limit: 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-643-S1

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-643-S1

Pollutant: State Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-643-S1

567 IAC 23.3(2)"a"

### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

### **Operating Limits**

Operating limits for this emission unit shall be:

- A. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-219) the owner or operator shall document:
  - (1) A description of the project (Project Number 11-219),
  - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-219), and
  - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded

under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.

- B. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
  - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Operating Limits A.(2). This excludes those pollutants that were major for the Prevention of Significant Deterioration (PSD) program and either went through a Best Available Control Technology (BACT) review or a "netting" analysis. Therefore, this requirement excludes NOx, CO, and greenhouse gases (GHG).
  - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.

### Reporting & Recordkeeping

- A. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in A. of Operating Limits, above.
- B. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3 (18)"f"(5), the owner or operator shall maintain a record containing the information required in B. of Operating Limits, shown above and that record shall be retained by the owner or operator for a period of five (5) years after the project (Project Number 11-219) is completed.
- C. Per 567 IAC 33.3(18)"f"(6), the owner or operator shall submit a report to the Department within sixty (60) days after the end of each year during which records must be generated under B, directly above, setting out the unit's annual emissions during the calendar year that preceded submission of the report.

Authority for Requirement: DNR Construction Permit 11-A-643-S1

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 131.9

Stack Opening (inches): 8 x14 Exhaust Temperature (°F): 150 Exhaust Flowrate (scfm): 1,045 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 11-A-643-S1

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

### **Monitoring Requirements**

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

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

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

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

# **Associated Equipment**

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
311	Mercury Sorbent Silo	CE 311: Bin Vent Filter	Mercury Sorbent	89 tons/hr	11-A-644-S1

# **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: No Visible Emissions

Authority for Requirement: DNR Construction Permit 11-A-644-S1

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>2.5</sub>)

Emission Limit: 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-644-S1

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-644-S1

Pollutant: State Particulate Matter (PM) Emission Limit: 0.1 gr/dscf, 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-644-S1

567 IAC 23.3(2)"a"

### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

### **Operating Limits**

Operating limits for this emission unit shall be:

- A. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-219) the owner or operator shall document:
  - (1) A description of the project (Project Number 11-219),
  - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-219), and
  - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded

under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.

- B. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
  - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in A. (2) of Operating Limits, shown above. This excludes those pollutants that were major for the Prevention of Significant Deterioration (PSD) program and either went through a Best Available Control Technology (BACT) review or a "netting" analysis. Therefore, this requirement excludes NO<sub>x</sub>, CO, and greenhouse gases (GHG).
  - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.

# Reporting & Recordkeeping

- A. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in A. of Operating Limits, above.
- B. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3 (18)"f"(5), the owner or operator shall maintain a record containing the information required in B. of Operating Limits, shown above and that record shall be retained by the owner or operator for a period of five (5) years after the project (Project Number 11-219) is completed.
- C. Per 567 IAC 33.3(18)"f"(6), the owner or operator shall submit a report to the Department within sixty (60) days after the end of each year during which records must be generated under B, directly above, setting out the unit's annual emissions during the calendar year that preceded submission of the report.

Authority for Requirement: DNR Construction Permit 11-A-644-S1

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 80.7

Stack Opening (inches, dia): 8 Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): 1,280 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 11-A-644-S1

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

#### **Monitoring Requirements**

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

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are 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 opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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

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

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

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

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

### **Emission Point ID Number: 312-F**

# Associated Equipment

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
312a	Ash Silo Conditioned Ash Truck Loadout (Fugitive)		150 ton/hr	
312b	Ash Silo Loadout (Telescopic unloader) (Fugitive)		150 ton/hr	
312c	Pyrites Dewater Bin 1 Loadout (coal sludge to truck) (Fugitive)	Fly Ash	250 ton/hr	18-A-670
312d	Pyrites Dewater Bin 2 Loadout (Fugitive)		250 ton/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 (PM) Emission Limit(s): See Footnote<sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 18-A-670

567 IAC 23.3(2)"c"

#### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall follow best management practices and take reasonable precautions to prevent the discharge of visible emissions of fugitive dust from the ash and pyrite loadout building.

Authority for Requirement: DNR Construction Permit 18-A-670

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Exhaust Temperature (°F): Ambient

Authority for Requirement: DNR Construction Permit 18-A-670

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

<sup>(1)</sup> The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dust beyond the lot line of the property.

# **Monitoring Requirements**

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒ Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required?

Yes 
No

# Emission Point ID Number: 312, 313, & 314 (Fugitive)

### Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
312	312	DFGD By-Product Silo Loadout		25 tons/hr	
313	313	SDA 0101 Flop Gast West	Flyash	4 tons/hr	16-A-322
314	314	SDA 0102 Flop Gast East		4 tons/hr	

# **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): See footnote<sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 16-A-322

567 IAC 23.3(2)"c"

Pollutant: Particulate Matter (PM) Emission Limit(s): See footnote<sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 16-A-322

### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating and/or monitoring requirements are not required by this permit at this time.

Authority for Requirement: DNR Construction Permit 16-A-322

#### **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 24.108(3)	

<sup>(1)</sup> The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property.

<sup>(2)</sup> The owner or operator shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1.

# Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
315	Telescopic Unloader Vent	CE 315: Cartridge Filter	Flyash	1,000 CFM	18-A-673

# **Applicable Requirements**

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

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

Pollutant: Opacity

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

Authority for Requirement: DNR Construction Permit 18-A-673

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.05 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-673

567 IAC 23.3(2)"a"

#### **Operational Limits & Reporting/Record keeping Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the Cartridge Filter (CE 315) according to the manufacturer's specifications and maintenance schedule. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Cartridge Filter (CE 315). This log shall include, but is not necessarily limited to:
  - i. The date and time any inspection and/or maintenance was performed on the Cartridge Filter (CE 315);
  - ii. Any issues identified during the inspection and the date each issue was resolved;
  - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and
  - iv. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 18-A-673

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

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 25

Stack Opening, (inches): 6 x 12 Exhaust Flow Rate (scfm): 1,000 Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit

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

# **Monitoring Requirements**

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

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

# Emission Point ID Number: 313-F, 314-F, and 316-F (Fugitive)

# Associated Equipment

Emission	Emission	Emission Unit	Raw	Rated	Construction
Point	Unit	Description	Material	Capacity	Permit
313-F	313-F	Coal Sludge Loading Dewater Bin 1 (Fugitive)	Flyash	22.4 tons/hr, each	18-A-671
314-F	314-F	Coal Sludge Loading Dewater Bin 2 (Fugitive)			18-A-672
316-F	316-F	Settling /Surge Tank (Fugitive)			18-A-674

# **Applicable Requirements**

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

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

Pollutant: Particulate Matter (PM) Emission Limit(s): See Footnote<sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 18-A-671, 18-A-672, 18-A-674

567 IAC 23.3(2)"c"

### Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall follow best management practices and take reasonable precautions to prevent the discharge of visible emissions of fugitive dust from the coal sludge bin.

Authority for Requirement: DNR Construction Permit 18-A-671, 18-A-672, 18-A-674

#### **Emission Point Characteristics**

Each emission point shall conform to the specifications listed below.

Exhaust Temperature (°F): Ambient

Authority for Requirement: DNR Construction Permit 18-A-671, 18-A-672, 18-A-674

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

<sup>(1)</sup> The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dust beyond the lot line of the property.

# **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 24.108(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 (IAC). When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix D.

# 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 24.108(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 24.105(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 24.108(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 24.108(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 24.108(9)"b"
- 6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. 567 IAC 24.108(15)"c"

# **G2. Permit Expiration**

- 1. Except as provided in rule 567—24.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—24.105(455B). 567 IAC 24.116(2)
- 2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 24.105(2). 567 IAC 24.105

### **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 24.107(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 24.108(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 24.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 24.108 (5)

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

- 1. The permittee is required under subrule 567 IAC 24.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
- 2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
- 3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
- 4. The fee shall be submitted annually by July 1 with forms specified by the department.
- 5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
- 6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
- 7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
- 8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 24.115(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 24.108 (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 24.108 (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 21.8(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 24.108(4), 567 IAC 24.108(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 24;
- b. Compliance test methods specified in 567 Chapter 21; 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 24.108(6)

#### G13. Hazardous Release

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

# G14. Excess Emissions and Excess Emissions Reporting Requirements

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

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

# 2. Excess Emissions Reporting

- a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
  - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and expected duration of the excess emission.
  - iv. The cause of the excess emission.
  - v. The steps being taken to remedy the excess emission.
  - vi. The steps being taken to limit the excess emission in the interim period.
- b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
  - i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and duration of the excess emission.
  - iv. The cause of the excess emission.
  - v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
  - vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 21.7(1)-567 IAC 21.7(4)

# **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 24.108(5)"b"

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

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

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

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 24.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—24.140(455B) through 567 24.144(455B));.
  - e. The changes comply with all applicable requirements.
  - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the

purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 24.110(1)

- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. 567 IAC 24.110(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 24.110(1). 567 IAC 24.110(3)
- 4. The permit shield provided in subrule 24.108(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 24.110(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 24.108(11)

# G18. Duty to Modify a Title V Permit

- 1. Administrative Amendment.
  - a. An administrative permit amendment is a permit revision that does any of the following:
    - i. Correct typographical errors
    - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source:
    - iii. Require more frequent monitoring or reporting by the permittee; or
    - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
  - b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
  - c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.
- 2. Minor Title V Permit Modification.
  - a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
    - i. Do not violate any applicable requirement;
    - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
    - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
    - iv. Do not seek to establish or change a permit term or condition for which there

is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

- v. Are not modifications under any provision of Title I of the Act; and vi. Are not required to be processed as significant modification under rule 567 24.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - ii. The permittee's suggested draft permit;
  - iii. Certification by a responsible official, pursuant to 567 IAC 24.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
  - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 24.107(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 24.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.
- 3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 24, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 24.111-567 IAC 24.113

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

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional

permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

#### **G20.** Asbestos

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

# **G21. Open Burning**

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

# G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 24.108(7)

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

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
- 5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

# **G24. Permit Reopenings**

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 24.108(9)"c"
- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is <u>not</u> required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
  - c. Reopening and revision on this ground is <u>not</u> required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 24.108(17)"a", 567 IAC 24.108(17)"b"
- 3. A permit shall be reopened and revised under any of the following circumstances:
  - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
  - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than

the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

- d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
- e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 24.114
- 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 24.114
- 5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 24.114

#### 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 24.108 (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 24.108 (8)

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

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 24.108 (9)"d"

## **G28.** Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 24.111(1). 567 IAC 24.111 (1)"d"

#### G29. Disclaimer

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

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks (42 days) 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 6200 Park Ave Suite 200 Des Moines, IA 50321 (515) 343-6589

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 21.10(7)"a", 567 IAC 21.10(9)

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

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. 567 IAC 26.1(1)

### **G32.** Contacts List

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

Iowa Compliance Officer

Air Branch

Enforcement and Compliance Assurance Division

U.S. EPA Region 7

11201 Renner Blvd.

Lenexa, KS 66219

(913) 551-7020

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

Chief, Air Quality Bureau

Iowa Department of Natural Resources

6200 Park Ave

Suite 200

Des Moines, IA 50321

(515) 313-8325

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

# Field Office 1

1101 Commercial Court, Suite 10 Manchester, IA 52057 (563) 927-2640

#### Field Office 3

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

#### Field Office 5

6200 Park Ave Suite 200 Des Moines, IA 50321 (515) 725-0268

### **Polk County Public Works Dept.**

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

#### Field Office 2

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

#### Field Office 4

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

#### Field Office 6

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

### **Linn County Public Health**

Air Quality Branch 1020 6<sup>th</sup> Street SE Cedar Rapids, IA 52401 (319) 892-6000

# V. Appendix A: Acid Rain and CSAPR Conditions, Transport Rule (TR) Trading Program Title V Requirements



AIR QUALITY BUREAU 6200 Park Ave Ste 200

# **Draft Phase II Acid Rain Permit**

Issued to: IPL - Ottumwa Generating Station

Operated by: Interstate Power and Light (Alliant Energy Co.)

ORIS code: 6254

Effective: Five Years from Issuance

For the Director of the Department of Natural Resources

Marnie Stein, Supervisor of Operating Permits Section

Date

# **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.
- 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) 24.135(455B) to 24.145(455B) and 567 IAC 24.100(455B) to 24.116(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

		2025	2026	2027	2028	2029	2030
	SO <sub>2</sub> allowances, under Table 2 of 40 CFR part 73.	19,127*	19,127*	19,127*	19,127*	19,127*	19,127*
Unit 1	NO <sub>x</sub> limit	approves a secompliance compliance determined emission lir tangentially  In addition all other ap	standard emis plan is effect plan, this unit in accordance mitation under fired units.	sion limitation etive beginnin it's annual ave e with 40 CFR r 40 CFR 76.7 ped NO <sub>x</sub> compairements of	n compliance g Date through through through the R part 75, shale (a)(1), which the bliance plan, the CFR part	ent of Natura plan for Unit i gh Date. Un mission rate fi l not exceed the is 0.40 lbs/mi this unit shall 76, including irements cov	3. The NO <sub>x</sub> der the NO <sub>x</sub> or each year, ne applicable mBtu for dry

\*The number of allowances allocated to Phase II affected units by U.S. EPA in 40 CFR part 73 Table 2 (Revised May 12, 2005). 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.

4) **Permit Application:** Attached.

# **Transport Rule (TR) Trading Program Title V Requirements**

# **Description of TR Monitoring Provisions**

The TR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following table(s). These unit(s) are subject to the requirements for the TR NO<sub>x</sub> Annual Trading Program, TR NO<sub>x</sub> Ozone Season Group 2 Trading Program and TR SO<sub>2</sub> Group 1 Trading Program.

,	Unit ID: 1 (ORIS Code: 6254)						
IPL/Alliant En	IPL/Alliant Energy Corp Ottumwa Generating Station						
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO <sub>2</sub> monitoring) and 40 CFR part 75, subpart H (for NO <sub>X</sub> monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E		
$SO_2$	X						
$NO_X$	X						
Heat input	X						

- 1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NOx Annual Trading Program), 97.830 through 97.835 (TR NOx Ozone Season Group 2 Trading Program), and 97.630 through 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
- 2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.
- 3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NO<sub>X</sub> Annual Trading Program), 97.835 (TR NO<sub>X</sub> Ozone Season Group 2 Trading Program) and/or 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
- 4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NO<sub>X</sub> Annual Trading Program), 97.830 through 97.834 (TR NO<sub>X</sub> Ozone Season Group 2 Trading Program) and/or 97.630 through 97.634 (TR SO<sub>2</sub>

Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NO<sub>x</sub> Annual Trading Program), 97.835 (TR NO<sub>x</sub> Ozone Season Group 2 Trading Program) and/or 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at <a href="http://www.epa.gov/airmarkets/emissions/petitions.html">http://www.epa.gov/airmarkets/emissions/petitions.html</a>.

5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NO<sub>X</sub> Annual Trading Program), 97.830 through 97.834 (TR NO<sub>X</sub> Ozone Season Group 2 Trading Program) and 97.630 through 97.634 (TR SO<sub>2</sub> Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

# TR NO<sub>X</sub> Annual Trading Program requirements (40 CFR 97.406)

# (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

# (b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NOx Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NOx Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

#### (c) NO<sub>x</sub> emissions requirements.

- (1) TR NO<sub>X</sub> Annual emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Annual units at the source.
  - (ii). If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Annual units at a TR NO<sub>x</sub> Annual source are in excess of the TR NO<sub>x</sub> Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:

- (A). The owners and operators of the source and each TR NO<sub>x</sub> Annual unit at the source shall hold the TR NO<sub>x</sub> Annual allowances required for deduction under 40 CFR 97.424(d); and
- (B). The owners and operators of the source and each TR NO<sub>X</sub> Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- (2) TR NO<sub>X</sub> Annual assurance provisions.
  - (i). If total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>X</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>X</sub> Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying—(A) The quotient of the amount by which the common designated representative's share of such NOx emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>X</sub> emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NOx emissions from all TR NOx Annual units at TR NOx Annual sources in the state for such control period exceed the state assurance level.
  - (ii). The owners and operators shall hold the TR NO<sub>X</sub> Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
  - (iii). Total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO<sub>X</sub> emissions exceed the sum, for such control period, of the state NO<sub>X</sub> Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
  - (iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>X</sub> emissions from the TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the state during a control period exceeds the common designated representative's assurance level.
  - (v). To the extent the owners and operators fail to hold TR NO<sub>X</sub> Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
    - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
    - (B). Each TR NO<sub>x</sub> Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

- (3) Compliance periods.
  - (i). A TR NO<sub>x</sub> Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
  - (ii). A TR NO<sub>X</sub> Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i). A TR NO<sub>X</sub> Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO<sub>X</sub> Annual allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR NO<sub>X</sub> Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO<sub>X</sub> Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO<sub>X</sub> Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.
- (6) Limited authorization. A TR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR NO<sub>X</sub> Annual Trading Program; and
  - (ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO<sub>X</sub> Annual allowance does not constitute a property right.

### (d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>X</sub> Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

### (e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

- (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO<sub>x</sub> Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
- (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAA.
- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>X</sub> Annual Trading Program.
- (2) The designated representative of a TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall make all submissions required under the TR NO<sub>X</sub> Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

#### (f) Liability.

- (1) Any provision of the TR NO<sub>X</sub> Annual Trading Program that applies to a TR NO<sub>X</sub> Annual source or the designated representative of a TR NO<sub>X</sub> Annual source shall also apply to the owners and operators of such source and of the TR NO<sub>X</sub> Annual units at the source.
- (2) Any provision of the TR NO<sub>x</sub> Annual Trading Program that applies to a TR NO<sub>x</sub> Annual unit or the designated representative of a TR NO<sub>x</sub> Annual unit shall also apply to the owners and operators of such unit.

# (g) Effect on other authorities.

No provision of the TR NO<sub>X</sub> Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO<sub>X</sub> Annual source or TR NO<sub>X</sub> Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

#### TR NO<sub>X</sub> Ozone Season Group 2 Trading Program Requirements (40 CFR 97.806)

### (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.813 through 97.818.

### (b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO<sub>x</sub> Ozone Season Group 2 source and each TR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.530 through 97.835 shall be used to calculate allocations of TR NO<sub>X</sub> Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the TR NO<sub>X</sub> Ozone Season

Group 2 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

# (c) NO<sub>x</sub> emissions requirements.

- (1) TR NO<sub>X</sub> Ozone Season Group 2 emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Ozone Season Group 2 source and each TR NO<sub>X</sub> Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Ozone Season Group 2 units at the source.
  - (ii). If total NOx emissions during a control period in a given year from the TR NOx Ozone Season Group 2 units at a TR NOx Ozone Season Group 2 source are in excess of the TR NOx Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR NO<sub>X</sub> Ozone Season Group 2 unit at the source shall hold the TR NO<sub>X</sub> Ozone Season Group 2 allowances required for deduction under 40 CFR 97.824(d); and
    - (B). The owners and operators of the source and each TR NO<sub>X</sub> Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.
- (2) TR NO<sub>X</sub> Ozone Season Group 2 assurance provisions.
  - (i). If total NO<sub>X</sub> emissions during a control period in a given year from all TR NO<sub>X</sub> Ozone Season Group 2 units at TR NO<sub>X</sub> Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>X</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>X</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.825(b), of multiplying—
    - (A). The quotient of the amount by which the common designated representative's share of such NO<sub>X</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>X</sub> emissions exceeds the respective common designated representative's assurance level; and
    - (B). The amount by which total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season Group 2 units at TR NO<sub>x</sub> Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
  - (ii). The owners and operators shall hold the TR NOx Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business

- day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NOx emissions from all TR NOx Ozone Season Group 2 units at TR NOx Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NOx emissions exceed the sum, for such control period, of the State NOx Ozone Season Group 2 trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart EEEEE or of the Clean Air Act if total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season Group 2 units at TR NO<sub>X</sub> Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>X</sub> emissions from the TR NO<sub>X</sub> Ozone Season Group 2 units at TR NO<sub>X</sub> Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR NO<sub>X</sub> Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
  - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B). Each TR NO<sub>X</sub> Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.

# (3) Compliance periods.

- (i). A TR NO<sub>X</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- (ii). A TR NO<sub>X</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i). A TR NO<sub>X</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO<sub>X</sub> Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR NO<sub>X</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO<sub>X</sub> Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO<sub>X</sub> Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart EEEEE.
- (6) Limited authorization. A TR NO<sub>X</sub> Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO<sub>X</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR NO<sub>X</sub> Ozone Season Group 2 Trading Program; and

- (ii). Notwithstanding any other provision of 40 CFR part 97, subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO<sub>X</sub> Ozone Season Group 2 allowance does not constitute a property right. **(d) Title V permit revision requirements.** 
  - (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NOx Ozone Season Group 2 allowances in accordance with 40 CFR part 97, subpart EEEEE.
  - (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.806(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

## (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO<sub>X</sub> Ozone Season Group 2 source and each TR NO<sub>X</sub> Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.816 for the designated representative for the source and each TR NO<sub>x</sub> Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.816 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart EEEEE.
  - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the  $TR\ NO_X$  Ozone Season Group 2 Trading Program.
- (2) The designated representative of a TR NOx Ozone Season Group 2 source and each TR NOx Ozone Season Group 2 unit at the source shall make all submissions required under the TR NOx Ozone Season Group 2 Trading Program, except as provided in 40 CFR 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

#### (f) Liability.

- (1) Any provision of the TR NO<sub>X</sub> Ozone Season Group 2 Trading Program that applies to a TR NO<sub>X</sub> Ozone Season Group 2 source or the designated representative of a TR NO<sub>X</sub> Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the TR NO<sub>X</sub> Ozone Season Group 2 units at the source.
- (2) Any provision of the TR NOx Ozone Season Group 2 Trading Program that applies to a TR NOx Ozone Season Group 2 unit or the designated representative of a TR NOx Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

#### (g) Effect on other authorities.

No provision of the TR NO<sub>x</sub> Ozone Season Group 2 Trading Program or exemption under 40 CFR 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO<sub>x</sub> Ozone Season Group 2 source or TR NO<sub>x</sub> Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

# TR SO<sub>2</sub> Group 1 Trading Program requirements (40 CFR 97.606)

# (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

#### (b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO<sub>2</sub> Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO<sub>2</sub> Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

# (c) $SO_2$ emissions requirements.

- (1) TR SO<sub>2</sub> Group 1 emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold, in the source's compliance account, TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO<sub>2</sub> emissions for such control period from all TR SO<sub>2</sub> Group 1 units at the source.
  - (ii). If total SO<sub>2</sub> emissions during a control period in a given year from the TR SO<sub>2</sub> Group 1 units at a TR SO<sub>2</sub> Group 1 source are in excess of the TR SO<sub>2</sub> Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold the TR SO<sub>2</sub> Group 1 allowances required for deduction under 40 CFR 97.624(d); and
    - (B). The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (2) TR SO<sub>2</sub> Group 1 assurance provisions.

- (i). If total SO<sub>2</sub> emissions during a control period in a given year from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO<sub>2</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
  - (A). The quotient of the amount by which the common designated representative's share of such SO<sub>2</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO<sub>2</sub> emissions exceeds the respective common designated representative's assurance level; and
  - (B). The amount by which total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR SO<sub>2</sub> Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO<sub>2</sub> emissions exceed the sum, for such control period, of the state SO<sub>2</sub> Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO<sub>2</sub> emissions from the TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR SO<sub>2</sub> Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
  - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B). Each TR SO<sub>2</sub> Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

# (3) Compliance periods.

- (i). A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (ii). A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting

the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

- (4) Vintage of allowances held for compliance.
  - (i). A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR SO<sub>2</sub> Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.
- (6) Limited authorization. A TR SO<sub>2</sub> Group 1 allowance is a limited authorization to emit one ton of SO<sub>2</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR SO<sub>2</sub> Group 1 Trading Program; and
  - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR SO<sub>2</sub> Group 1 allowance does not constitute a property right.

# (d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO<sub>2</sub> Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E), Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

#### (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO<sub>2</sub> Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.
  - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO<sub>2</sub> Group 1 Trading Program.
- (2) The designated representative of a TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall make all submissions required under the TR SO<sub>2</sub> Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

# (f) Liability.

- (1) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 source or the designated representative of a TR SO<sub>2</sub> Group 1 source shall also apply to the owners and operators of such source and of the TR SO<sub>2</sub> Group 1 units at the source.
- (2) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 unit or the designated representative of a TR SO<sub>2</sub> Group 1 unit shall also apply to the owners and operators of such unit.

# (g) Effect on other authorities.

No provision of the TR SO<sub>2</sub> Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO<sub>2</sub> Group 1 source or TR SO<sub>2</sub> Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

# VI. Appendix B: Weblinks to Standards

#### 40 CFR 60, Subpart A Requirements

**General Provisions** 

Weblink: <a href="https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A">https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A</a>

## 40 CFR 60, Subpart D Requirements

Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971 – 40 CFR 60, Subpart D.

Weblink: <a href="https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-D">https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-D</a>

# 40 CFR 60, Subpart Y Requirements

Standards of Performance for Coal Preparation and Processing Plants - 40 CFR 60, Subpart Y Weblink: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Y

## 40 CFR 63, Subpart A Requirements

**General Provisions** 

Weblink: <a href="https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A">https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A</a>

#### 40 CFR 63, Subpart DDDDD Requirements

National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters – 40 CFR 63, Subpart DDDDD.

Weblink: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-DDDDD

#### 40 CFR Part 63, Subpart UUUUU

National Emission Standards for Hazardous Air Pollutants: Coal and Oil-Fired Electric Utility Steam Generating Units - 40 CFR Part 63, Subpart UUUUU

Weblink: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-UUUUU

# VII. Appendix C: Consent Decree

Any requirements contained in this permit that are required by and refer to "Consent Decree" [United States of America and The State of Iowa, and The County of Linn, Iowa and Sierra Club v. Interstate Power and Light Company, Civil Action No.: C15-0061; United States District Court for the Northern District of Iowa (September 2, 2015)] have been included in this permit solely to comply with the Consent Decree.

If and when the Consent Decree is terminated, the substantive requirements originating in and required by the Consent Decree and included in this permit, shall remain in full force and effect. As required by Consent Decree Paragraph 225, the requirements and limitations enumerated in the Consent Decree are permanently included in this federally enforceable permit and shall remain applicable requirements as that term is defined in 40 CFR §70.2.

The requirements found in permit Conditions 14.A. – 14.E. were established upon the Interstate Power and Light (IPL) "system" in Iowa per the Consent Decree. "System" as used in this permit is defined as the Burlington, Dubuque, Lansing, M.L. Kapp, Ottumwa, Prairie Creek, Sixth Street, and Sutherland Generating Stations. The individual Generating Stations are defined by the Generating Station location and its units as listed in the following table:

Wapello County  • Unit 1 (726 MW, coal-fired)  Sutherland Generating Station <sup>1</sup>
Sutherland Generating Station <sup>1</sup>
Marshall County
• Unit 1 (38 MW, fossil-fuel fired)
• Unit 2 (38 MW, fossil-fuel fired)
• Unit 3 (82 MW, fossil-fuel fired)
Sixth Street Generating Station <sup>2</sup>
Linn County
• Unit 1 (10 MW, coal-fired)
• Unit 2 (18 MW, coal-fired)
• Unit 3 (17 MW, coal-fired)
• Unit 4 (17 MW, coal-fired)
• Unit 5 (32 MW, coal-fired)
,
Milton L. Kapp (M.L. Kapp) Generating <sup>4</sup>
Station
Clinton County
• Unit 1 (19 MW, coal-fired)
• Unit 2 (219 MW, coal-fired)

- 1) Sutherland Unit 2 no longer operates and has been removed from the Title V operating permit.
- 2) Sixth Street Generating Station no longer operates and its Title V permit has been rescinded.
- 3) Lansing Units 1, 2, and 3 no longer operate and the construction permit for each unit has been rescinded.

4) M.L. Kapp Unit 1 no longer operates and it has been removed from the Title V operating permit.

# A. System-wide Emission Limits

(1) As required by Consent Decree Paragraph 102, the IPL "system" in Iowa shall not exceed the following annual tonnage limits for NO<sub>x</sub>:

Calendar Year	System-wide Annual NO <sub>x</sub> Limit (tons/yr)
2015, 2016, and 2017	11,500
2018 and 2019	10,500
2020	7,500
2021	7,250
2022 and continuing each calendar year thereafter	6,800

(2) As required by Consent Decree Paragraph 126, the IPL "system" in Iowa shall not exceed the following annual tonnage limits for SO<sub>2</sub>:

Calendar Year	System-wide Annual SO <sub>2</sub> Limit (tons/yr)
2015	39,000
2016	23,500
2017 and 2018	14,100
2019 and 2020	12,000
2021	11,000
2022, 2023, 2024, and 2025	6,000
2026 and continuing each calendar year thereafter	3,250

#### B. Consent Decree Monitoring

- (1) As required by Consent Decree Paragraphs 103 and 104, the owner or operator shall demonstrate compliance with the Consent Decree NO<sub>x</sub> limits using the following procedures:
  - (a) For system-wide annual tonnage limits and the Prairie Creek annual tonnage limits:
    - (i) For all listed units except for Prairie Creek Generating Station Units 1 and 2: As required by Consent Decree Paragraph 104, the owner or operator shall use NO<sub>x</sub> emission data obtained from a CEMS in accordance with the procedures specified in 40 CFR Part 75.
    - (ii) For Prairie Creek Generating Station Units 1 and 2: As required by Consent Decree Paragraph 114, the owner or operator shall calculate calendar-year NO<sub>x</sub> mass emissions for inclusion in the system-wide annual tonnage limit [Condition 14.A.(1)] and the Prairie Creek annual tonnage limit by multiplying the NO<sub>x</sub> rate, as determined from the last performed reference method test, by the respective heat input for each unit for that calendar year. The heat input shall be calculated by multiplying the amount of each fuel combusted by its respective gross heating value and summed for all fuels

#### combusted in each boiler.

- (2) Per Consent Decree Paragraphs 127 and 128, the owner or operator shall demonstrate compliance with the Consent Decree SO<sub>2</sub> limits using the following procedures:
  - (a) For system-wide annual tonnage limits the owner or operator shall use SO<sub>2</sub> emission data obtained from a CEMS in accordance with the procedures specified in 40 CFR Part 75. Once a unit is refueled the SO<sub>2</sub> emissions shall be calculated using a stack test emission factor or by using methods set forth in US EPA's AP-42 (Compilation of Air Pollutant Emission Factors).

#### C. Allowances

#### (1) NO<sub>x</sub> Allowances:

- (a) As required by Consent Decree Paragraph 43, "*NO<sub>x</sub> Allowance*" is defined as an authorization to emit a specific amount of NO<sub>x</sub> that is allocated or issued under an emission trading or marketable permit program of any kind established under the Clean Air Act (CAA) or applicable State Implementation Plan; provided, however, that with respect to any such program that first applies to emissions occurring after December 31, 2011, a "NO<sub>x</sub> Allowance" shall include an allowance created and allocated under such program only for control periods starting on or after September 2, 2019 [the fourth anniversary of the date of entry of the Consent Decree].
- (b) As required by Consent Decree Paragraph 111, the owner or operator shall surrender or transfer to a non-profit third party selected by the owner or operator for surrender, all NO<sub>x</sub> allowances required to be surrendered pursuant to Consent Decree Paragraph 107 by June 30 of the immediately following calendar year. If any NO<sub>x</sub> allowances required to be surrendered are transferred directly to a non-profit third-party, the owner or operator shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of the Consent Decree. The report shall:
  - (i) Identify the non-profit recipient(s) of the NO<sub>x</sub> allowances and list the serial numbers of the transferred NO<sub>x</sub> allowances.
  - (ii) Include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the NO<sub>x</sub> allowances and will not use any of the NO<sub>x</sub> allowances to meet any obligation imposed by any environmental law.
  - (iii) No later than the third periodic report due after the transfer of any NO<sub>x</sub> allowances, the owner or operator shall include a statement that the third-party recipient(s) surrendered the NO<sub>x</sub> allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 112 of the Consent Decree within one (1) year after the owner or operator transferred the NO<sub>x</sub> allowances to them. The owner or operator shall not have complied with the NO<sub>x</sub> allowance surrender requirements of Consent Decree Paragraph 111 until all third-party recipient(s) have actually surrendered the transferred NO<sub>x</sub> allowances to EPA.

- (c) As required by Consent Decree Paragraph 112, for all allowances required to be surrendered, the owner or operator shall ensure that a NO<sub>x</sub> allowance transfer request form is first submitted to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such NO<sub>x</sub> allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such NO<sub>x</sub> allowance transfer requests may be made in an electronic manner using the EPA's Clean Air Markets Division Business System or similar system provided by EPA. As part of submitting these transfer requests, the owner or operator shall ensure that the transfer of its NO<sub>x</sub> allowances are irrevocably authorized and that the source and location of the NO<sub>x</sub> allowances being surrendered are identified by name of account and any applicable serial or other identification numbers or station names.
- (d) As required by Consent Decree Paragraph 105, the owner or operator shall not use NO<sub>x</sub> allowances to comply with any requirement of the Consent Decree, including claiming compliance with any emission limitation required by the Consent Decree by using, tendering, or otherwise applying NO<sub>x</sub> allowances to offset any excess emissions.
- (e) As required by Consent Decree Paragraph 106, except as provided in Consent Decree Paragraphs 107 and 108, the owner or operator shall not sell, bank, trade, or transfer its interest in any NO<sub>x</sub> allowances allocated to units in the System.
- (f) As required by Consent Decree Paragraph 107, for each calendar year, the owner or operator shall surrender all NO<sub>x</sub> allowances allocated to the units in the System for that calendar year that the owner or operator does not need to meet federal and/or state CAA regulatory requirements for System units.
- (g) As required by Consent Decree Paragraph 108, the owner or operator is allowed to purchase or otherwise obtain NO<sub>x</sub> allowances from another source for purposes of complying with federal and/or state CAA regulatory requirements to the extent otherwise allowed by law.
- (h) As required by Consent Decree Paragraph 109, the owner or operator's use and surrender of NO<sub>x</sub> Allowances are permanent and are not subject to any termination provision of the Consent Decree.

#### (2) NO<sub>x</sub> Super-Compliant Allowances

- (a) As required by Consent Decree Paragraph 110, notwithstanding Consent Decree Paragraphs 106 and 107, in each calendar year the owner or operator may sell, bank, use, trade, or transfer NO<sub>x</sub> allowances allocated to the units in the System that are made available in that calendar year solely as a result of:
  - (i) The installation and operation of any  $NO_x$  air pollution control equipment that is not otherwise required under the Consent Decree and is not otherwise required by law;
  - (ii) The use of a selective catalytic reduction (SCR) prior to the date established in the Consent Decree; or

(iii) Achievement and maintenance of an emission rate below an applicable 30-day rolling average emission rate or 12-month rolling average emission rate for NO<sub>x</sub>:

provided the owner or operator is also in compliance for the calendar year with all emission limitations for  $NO_x$  set forth in the Consent Decree. The owner or operator shall timely report the generation of such Super-Compliant Allowances in accordance with Section XII (Periodic Reporting) of the Consent Decree.

#### (3) SO<sub>2</sub> Allowances:

- (a) As required by Consent Decree Paragraph 66, "SO<sub>2</sub> Allowance" is defined as an authorization to emit a specified amount of SO<sub>2</sub> that is allocated or issued under an emission trading or marketable permit program of any kind established under the CAA or applicable State Implementation Plan; provided, however, that with respect to any such program that first applies to emissions occurring after December 31, 2011, a "SO<sub>2</sub> Allowance" shall include an allowance created and allocated under such program only for control periods starting on or after September 2, 2019 [the fourth anniversary of the date of entry of the Consent Decree].
- (b) As required by Consent Decree Paragraph 135, the owner or operator shall surrender or transfer to a non-profit third party selected by the owner or operator for surrender, all SO<sub>2</sub> allowances required to be surrendered pursuant to Consent Decree Paragraph 131 by June 30 of the immediately following calendar year. If any SO<sub>2</sub> allowances required to be surrendered are transferred directly to a non-profit third-party, the owner or operator shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of the Consent Decree. The report shall:
  - (i) Identify the non-profit recipient(s) of the SO<sub>2</sub> allowances and list the serial numbers of the transferred SO<sub>2</sub> allowances.
  - (ii) Include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the SO<sub>2</sub> allowances and will not use any of the SO<sub>2</sub> allowances to meet any obligation imposed by any environmental law.
  - (iii) No later than the third periodic report due after the transfer of any SO<sub>2</sub> allowances, the owner or operator shall include a statement that the third-party recipient(s) surrendered the SO<sub>2</sub> allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 136 of the Consent Decree within one (1) year after the owner or operator transferred the SO<sub>2</sub> allowances to them. The owner or operator shall not have complied with the SO<sub>2</sub> allowance surrender requirements of Consent Decree Paragraph 135 until all third-party recipient(s) have actually surrendered the transferred SO<sub>2</sub> allowances to EPA.
- (c) As required by Consent Decree Paragraph 136, for all allowances required to be surrendered, the owner or operator shall ensure that a SO<sub>2</sub> allowance transfer request form is first submitted to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO<sub>2</sub> allowances to the EPA

Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such SO<sub>2</sub> allowance transfer requests may be made in an electronic manner using the EPA's Clean Air Markets Division Business System or similar system provided by EPA. As part of submitting these transfer requests, the owner or operator shall ensure that the transfer of its SO<sub>2</sub> allowances are irrevocably authorized and that the source and location of the SO<sub>2</sub> allowances being surrendered are identified by name of account and any applicable serial or other identification numbers or station names.

- (d) As required by Consent Decree Paragraph 129, the owner or operator shall not use SO<sub>2</sub> allowances to comply with any requirement of the Consent Decree, including claiming compliance with any emission limitation required by the Consent Decree by using, tendering, or otherwise applying SO<sub>2</sub> allowances to offset any excess emissions.
- (e) As required by Consent Decree Paragraph 130, except as provided in Consent Decree Paragraphs 131 and 132, the owner or operator shall not sell, bank, trade, or transfer its interest in any SO<sub>2</sub> allowances allocated to units in the System.
- (f) As required by Consent Decree Paragraph 131, for each calendar year, the owner or operator shall surrender all SO<sub>2</sub> allowances allocated to the units in the System for that calendar year that the owner or operator does not need to meet federal and/or state CAA regulatory requirements for System units.
- (g) As required by Consent Decree Paragraph 132, the owner or operator is allowed to purchase or otherwise obtain SO<sub>2</sub> allowances from another source for purposes of complying with federal and/or state CAA regulatory requirements to the extent otherwise allowed by law.
- (h) As required by Consent Decree Paragraph 133, the owner or operator's use and surrender of SO<sub>2</sub> Allowances are permanent and are not subject to any termination provision of the Consent Decree.

### (4) SO<sub>2</sub> Super-Compliant Allowances

- (a) As required by Consent Decree Paragraph 134, notwithstanding Consent Decree Paragraphs 130 and 131, in each calendar year the owner or operator may sell, bank, use, trade, or transfer SO<sub>2</sub> allowances allocated to the units in the System that are made available in that calendar year solely as a result of:
  - (i) The installation and operation of any SO<sub>2</sub> air pollution control equipment that is not otherwise required under the Consent Decree and is not otherwise required by law;
  - (ii) The use of a dry flue gas desulfurization (DFGD) prior to the date established in the Consent Decree; or
  - (iii) Achievement and maintenance of an emission rate below an applicable 30-day rolling average emission rate or 12-month rolling average emission rate for SO<sub>2</sub>;

provided the owner or operator is also in compliance for the calendar year with all emission limitations for  $SO_2$  set forth in the Consent Decree. The owner or operator shall timely report the generation of such Super-Compliant Allowances in accordance with Section XII (Periodic Reporting) of the Consent Decree.

#### D. Repowering Requirements

- (1) As defined in Paragraph 61 of the Consent Decree, "Repower" or "Repowered" means the removal and replacement of the Unit components such that the replaced unit generates electricity solely through the combustion of natural gas through the use of a combined cycle combustion turbine technology. Nothing herein shall prevent the reuse of any equipment at any existing unit or new emissions unit, provided that the owner or operator applies for, and obtains, all required permits, including, if applicable, a Prevention of Significant Deterioration (PSD) or Nonattainment New Source Review (NSR) permit.
- (2) As defined in Paragraph 62 of the Consent Decree, "Retire," "Retired," or "Retirement" means to permanently shut down a unit such that the unit cannot physically or legally burn fossil fuel, and to comply with applicable state and federal requirements for permanently ceasing operation of the unit as a fossil fuel-fired electric generating unit, including removing the unit from Iowa's air emissions inventory, and amending all applicable permits so as to reflect the permanent shutdown status of such unit. The owner or operator can choose to not retire and to continue to operate such a unit only if is "Refueled" or "Repowered" within the meaning of the Consent Decree, and the owner or operator obtains any and all required CAA permits for the "Refueled" or "Repowered" unit, including but not limited to an appropriate permit pursuant to CAA Subchapter I, Parts C and D, and pursuant to the applicable Iowa state implementation plan (SIP) provisions implementing CAA Subchapter I.
- (3) The owner or operator has ceased operations at Lansing Unit 1, Lansing Unit 2, Lansing Unit 3, M.L. Kapp Unit 1, Sutherland Unit 2, Sixth Street Unit 1, Sixth Street Unit 2, Sixth Street Unit 3, Sixth Street Unit 4, and Sixth Street Unit 5. In accordance with Paragraph 78 of the Consent Decree, the permanent "Retirement" of these units became an enforceable obligation such that the owner or operator may only operate if:
  - (i) It is "Repowered" per Condition 14.D.(1) and
  - (ii) The owner or operator obtains any and all required CAA permit(s) for the repowered unit including but not limited to an appropriate permit pursuant to CAA Subchapter I, Parts C and D, and pursuant to the applicable Iowa State Implementation Plan (SIP) provisions implementing CAA Subpart I.

#### E. Post Consent Decree Reporting

As required by 567 IAC 25.1(6), the owner or operator shall provide quarterly reports to the Department no later than thirty (30) calendar days following the end of the calendar quarter on forms provided by the Department for each CEMS. All periods of recorded

emissions in excess of applicable standards, the results of all calibrations and zero checks and performance evaluations or source upsets and any apparent reasons for these malfunctions and upsets shall be included in the report. In addition, the owner or operator shall include in the quarterly report all periods of monitor malfunction, maintenance, and/or repair procedures performed.

Upon the termination of the Consent Decree, the owner or operator shall submit periodic reports as required by Title V to demonstrate compliance with all Consent Decree requirements contained within Conditions 1 (Emission Limits), 5 (Operating Requirements with Associated Monitoring and Recordkeeping), and 14 (System-wide Consent Decree Requirements for IPL Facilities in Iowa) of this permit. At a minimum, the information in the reports shall include:

- (1) All information necessary to determine compliance during the reporting period with:
  - (a) All applicable system-wide annual tonnage limitations;
  - (b) The obligation to monitor SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions; and
  - (c) The obligation to surrender NO<sub>x</sub> and SO<sub>2</sub> allowances.
- (2) Emission reporting and allowance accounting information necessary to determine super-compliant NO<sub>x</sub> and SO<sub>2</sub> allowances that the owner or operator claims to have generated in accordance with Consent Decree Paragraphs 110 and 134 through control of emissions beyond the requirements of the Consent Decree.

# VIII. Appendix D: Executive Order (EO10) Rules Crosswalk

<b>Previous Chapter</b>	Current	Previous Title and	Current Title and	Actions Taken
Number (Prior to	Chapter	Description (Prior to 5/15/2024)	Description	
5/15/2024)	Number	, , , , , , , , , , , , , , , , , , , ,		
20	20 (Reserved)	Scope of Title - Definitions	N/A	Definitions moved to Ch. 21, 22 and 23.
				Rescinded Ch. 20. (Reserved)
21	21	Compliance	Compliance, Excess Emissions, and	<b>Kept and combined</b> with rules from Chapters 24, 25, 26, and 29.
			Measurement of Emissions	
22	22	Controlling Pollution-Permits	Controlling Air Pollution - Construction	Kept construction permit rules and combined with Ch. 20 (definitions) and Ch. 28 (NAAQS).
			Permitting	
				Moved operating permit rules to Chapter 24.
22.100 - 22.300(12)	(New) 24	N/A	Operating Permits	Moved operating permit rules from Ch. 22 to Ch. 24.
23	23	Emission Standards	Air Emission Standards	Kept
24	(New) 21	Excess Emissions	Compliance, Excess Emissions, and	Moved rules and combined with Ch. 21.
			Measurement of Emissions	
				Moved TV rules here (to Ch. 24).
25	(New) 21	Emissions Measurement	Compliance, Excess Emissions, and	Moved rules and combined with Ch. 21.
			Measurement of Emissions	
				Rescinded Ch. 25. (Reserved)
26	(New) 21	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and	Moved rules and combined with Ch. 21.
			Measurement of Emissions	
				Rescinded Ch. 26. (Reserved)
27	27	Local Program Acceptance	Local Program Acceptance	Kept
28	22	NAAQS	N/A	Moved rules and combined with Ch. 22.
				Rescinded Ch. 28. (Reserved)
29	(New) 21	Opacity Qualifications	Compliance, Excess Emissions, and	Moved rules and combined with Ch. 21.
			Measurement of Emissions	
				Rescinded Ch. 29. (Reserved)
30	30	Fees	Fee	Kept
31	31	Nonattainment Areas	Nonattainment New Source Review	Kept
32	N/A	AFO Field Study	N/A	Rescinded Ch. 32. (Reserved)
33	33	Special regulations and construction permit		Kept
		requirements for major stationary	stationary sources—Prevention of significant	
		sources—Prevention of significant	deterioration (PSD)	
		deterioration (PSD) of air quality		
34	N/A	Emissions Trading-CAIR-CAMR	N/A	Rescinded Ch. 34. (Reserved)
35	N/A	Grant Assistance Programs	N/A	Rescinded Ch. 35. (Reserved)

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<b>Previous Chapter</b>	Current	Previous Title and	Current Title and	Actions Taken
Number (Prior to	Chapter	Description (Prior to 5/15/2024)	Description	
5/15/2024)	Number			
20	20 (Reserved)	Scope of Title - Definitions	N/A	Definitions moved to Ch. 21, 22 and 23.
				Rescinded Ch. 20. (Reserved)
20.1	N/A	Scope of title	N/A	
20.2	Ch. 21, 22, 23	Definitions	Definitions	See beginning of Ch. 21, 22, and 23
20.3	N/A	Air quality forms generally	N/A	

21	21	Compliance	Compliance, Excess Emissions, and	Kept and combined with rules from Chapters 24, 25, 26, and 29.
			Measurement of Emissions	
21.1	21.1	Compliance Schedule	Definitions and compliance requirements	Added definitions from Ch. 21, some language updated
21.2	21.2	Variances	Variances	Some language updated
21.3	21.3	Emission reduction program	Reserved	Reserved
21.4	21.4	Circumvention of rules	Circumvention of rules	Minor language updated
21.5	21.5	Evidence used in establishing that a violation has	Evidence used in establishing that a violation has	21.5(2) Reserved, some language updated
		or is occurring	occurred or is occurring	
21.6	21.6	Temporary electricity generation for disaster	Temporary electricity generation for disaster	Minor language updated
		situations	situations	
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
N/A	21.9	N/A	Compliance with other requirements	New language
25.1	21.10	Testing and sampling of new and existing	Testing and sampling of new and existing	Moved from Ch. 25, some language updated
		equipment	equipment	
25.2	21.11	Continuous emission monitoring under the acid	Continuous emission monitoring under the acid	Moved from Ch. 25, some language updated
		rain program	rain program	
25.3	N/A	Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated
26.1	21.14	Prevention of air pollution emergency episodes -	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
		General		
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions	Abatement strategies emission reduction actions	Moved from Ch. 26, reference federal appendix table
		alert level	alert level	
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions	Abatement strategies emission reduction actions	Moved from Ch. 26, reference federal appendix table
		warning level	warning level	
Ch 26 Table V	Table III	Abatement strategies emission reduction actions	Abatement strategies emission reduction actions	Moved from Ch. 26, reference federal appendix table
		emergency level	emergency level	

22	22	Controlling Pollution-Permits	Controlling Air Pollution - Construction	<b>Kept construction permit rules and combined</b> with Ch. 20 (definitions) and Ch. 28 (NAAQS).
			Permitting	
				Moved operating permit rules to Chapter 24.
22.1	22.1	Permits required for new or existing stationary	Definitions and permit requirements for new or	Added definitions from Ch. 20, some language updated
		sources	existing stationary sources	
22.2	22.2	Processing permit applications	Processing permit applications	
22.3	22.3	Issuing permits	Issuing permits	
22.4	22.4	Special requirements for major stationary	Major stationary sources located in areas	
		sources located in areas designated attainment	designated attainment or unclassified (PSD)	
		or unclassified (PSD)		
22.5	22.5	Special requirements for nonattainment areas	Major stationary sources located in areas	
			designated Nonattainment	
22.6	22.6	Nonattainment area designations	Reserved	

Number (Prior to	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
22.7	22.7	Alternative emission control program	Alternative emission control program	
22.8	22.8	Permit by rule	Permit by rule	
22.9	22.9	Special requirements for visibility protection	Special requirements for visibility protection	A lot of language updated or removed
22.10	22.10	elevators, country grain terminal elevators, grain	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated
22.12 to 22.99	N/A	Reserved	N/A	Removed

22.100 - 22.300(12)	(New) 24	N/A	Operating Permits	Moved operating permit rules from Ch. 22 to Ch. 24.
22.100	24.100	Definitions for Title V operating permits	Definitions for Title V operating permits	Moved from Ch. 22, some language updated, many 40 CFR 70 definitions adopted by reference
22.101	24.101	Applicability of Title V operating permit	Applicability of Title V operating permit	Moved from Ch. 22, some language updated to correct punctuation and remove old dates
		requirements	requirements	
22.102	24.102	Source category exemptions	Source category exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.103	24.103	Insignificant activities	Insignificant activities	Moved from Ch. 22, some language updated to correct typos and remove old dates
22.104	24.104	Requirement to have a Title V permit	Requirement to have a Title V permit	Moved from Ch. 22, some language updated no changes to rule text
22.105	24.105	Title V permit applications	Title V permit applications	Moved from Ch. 22, updated language to address electronic submissions and remove past application due dates
22.106	24.106	Annual Title V emissions inventory	Annual Title V emissions inventory	Moved from Ch. 22, no changes to rule text
22.107	24.107	Title V permit processing procedures	Title V permit processing procedures	Moved from Ch. 22, some language updated to update locations of public records and remove old CFR amendment dates
22.108	24.108	Permit content	Permit content	Moved from Ch. 22, some language updated to correct punctuation, remove old dates, and adopt 40 CFR 70 rules by reference
22.109	24.109	General permits	General permits	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.110	24.110	Changes allowed without a Title V permit revision (off-permit revisions)	Changes allowed without a Title V permit revisior (off-permit revisions)	Moved from Ch. 22, some language updated to remove redundant language
22.111	24.111	Administrative amendments to Title V permits	Administrative amendments to Title V permits	Moved from Ch. 22, no changes to rule text
22.112	24.112	Minor Title V permit modifications	Minor Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.113	24.113	Significant Title V permit modifications	Significant Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.114	24.114	Title V permit reopenings	Title V permit re-openings	Moved from Ch. 22 to Ch. 24, some language updated to adopt 40 CFR 70 rules by reference
22.115	24.115	Suspension, termination, and revocation of Title V permits	Suspension, termination, and revocation of Title V permits	Moved from Ch. 22, no changes to rule text
22.116	24.116	Title V permit renewals	Title V permit renewals	Moved from Ch. 22, no changes to rule text
22.117-22.119	24.117-24.119	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.120	24.120	Acid rain program—definitions	Acid rain program—definitions	Moved from Ch. 22, some language updated to remove old CFR amendment dates and address electronic submissions
22.121	24.121	Measurements, abbreviations, and acronyms	Reserved	Moved from Ch. 22, no changes to rule text
22.122	24.122	Applicability	Applicability	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.123	24.123	Acid rain exemptions	Acid rain exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.124	24.124	Retired units exemption	Reserved	Moved from Ch. 22, no changes to rule text
22.125	24.125	Standard requirements	Standard requirements	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.126	24.126	Designated representative—submissions	Designated representative—submissions	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.127	24.127	Designated representative—objections	Designated representative—objections	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.128	24.128	Acid rain applications—requirement to apply	Acid rain applications—requirement to apply	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference

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22.129	24.129	Information requirements for acid rain permit	Information requirements for acid rain permit	Moved from Ch. 22, no changes to rule text
		applications	applications	
Previous Chapter	Current	Previous Title and	Current Title and	Actions Taken
Number (Prior to	Chapter	Description (Prior to 5/15/2024)	Description	
•		Description (1 1101 to 5) 15/2024)	Description	
5/15/2024)	Number			
22.130	24.130	Acid rain permit application shield and binding	Acid rain permit application shield and binding	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
		effect of permit application	effect of permit application	
22.131	24.131	Acid rain compliance plan and compliance	Acid rain compliance plan and compliance	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
		options—general	options—general	
22.132	24.132	Repowering extensions	Reserved	Moved from Ch. 22, no changes to rule text
22.133	24.133	Acid rain permit contents—general	Acid rain permit contents—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.134	24.134	Acid rain permit shield	Acid rain permit shield	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.135	24.135	Acid rain permit issuance procedures—general	Acid rain permit issuance procedures—general	Moved from Ch. 22, no changes to rule text
22.136	24.136	Acid rain permit issuance	Acid rain permit issuance	Moved from Ch. 22, no changes to rule text
22.427	24.427	procedures—completeness	procedures—completeness	March Con Ch. 22 and a control of the L
22.137	24.137	Acid rain permit issuance procedures—statement	Acid rain permit issuance procedures—statement	INIOVED From Cn. 22, no changes to rule text
22.422	24.422	of basis	of basis	
22.138	24.138	Issuance of acid rain permits	Issuance of acid rain permits	Moved from Ch. 22, some language updated to remove old dates and deadlines
22.139	24.139	Acid rain permit appeal procedures	Acid rain permit appeal procedures	Moved from Ch. 22, no changes to rule text
22.140	24.140	Permit revisions—general	Permit revisions—general	Moved from Ch. 22, some language updated to remove old dates
22.141	24.141	Permit modifications	Permit modifications	Moved from Ch. 22, no changes to rule text
22.142	24.142	Fast-track modifications	Fast-track modifications	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.143	24.143	Administrative permit amendment	Administrative permit amendment	Moved from Ch. 22, some language updated to remove fax option
22.144	24.144	Automatic permit amendment	Automatic permit amendment	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.145	24.145	Permit reopenings	Permit re-openings	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.146	24.146	Compliance certification—annual report	Compliance certification—annual report	Moved from Ch. 22, no changes to rule text
22.147	24.147	Compliance certification—units with repowering extension plans	Reserved	Moved from Ch. 22, no changes to rule text
22.148	24.148	Sulfur dioxide opt-ins	Sulfur dioxide opt-ins	Moved from Ch. 22, some language updated to update the 40 CFR Part 74 amendment date
22.149 - 22.199	24.149 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.200	24.200 - 24.299	Definitions for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.201	24.200 - 24.299	Eligibility for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.203	24.200 - 24.299	Voluntary operating permit applications	Reserved	Moved from Ch. 22, no changes to rule text
22.204	24.200 - 24.299	Voluntary operating permit fees	Reserved	Moved from Ch. 22, no changes to rule text
22.205	24.200 - 24.299	Voluntary operating permit processing procedures	Reserved	Moved from Ch. 22, no changes to rule text
22.206	24.200 - 24.299	Permit content	Reserved	Moved from Ch. 22, no changes to rule text
22.207	24.200 - 24.299	Relation to construction permits	Reserved	Moved from Ch. 22, no changes to rule text
22.208	24.200 - 24.299	Suspension, termination, and revocation of	Reserved	Moved from Ch. 22, no changes to rule text
		voluntary operating permits		
22.209	24.200 - 24.299	Change of ownership for facilities with voluntary	Reserved	Moved from Ch. 22, no changes to rule text
-		operating permits		,
22.210 - 22.299	24.200 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.300	24.300	Operating permit by rule for small sources	Operating permit by rule for small sources	Moved from Ch. 22, no changes to rule text
	•	· · · · · · · · · · · · · · · · · · ·	·	
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23	23	Emission Standards	Air Emission Standards	Kept
23.1	23.1	Emission standards	Emission standards	Kept, language updated, tables used
23.2	23.2	Open burning	Open burning	Kept, some language updated
23.3	23.3	Specific contaminants	Specific contaminants	Kept, some language updated
23.4	23.4	Specific processes	Specific processes	Kept, some language updated
23.5	23.5	Anaerobic lagoons	Anaerobic lagoons	Kept, some language updated
23.6	23.6	Alternative emission limits (the "bubble	Reserved	Removed
		concept")		

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Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
24	(New) 21	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21.
				Moved operating permit rules here (to Ch. 24).
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
25	(New) 21	Emissions Measurement	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21.
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Rescinded Ch. 25. (Reserved)  Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3		Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
26	(New) 21	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21.  Rescinded Ch. 26. (Reserved)
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
27	27	Local Program Acceptance	Local Program Acceptance	Kept
27.1	27.1	General	General	Kept, some language updated
27.2	27.2	Certificate of acceptance	Certificate of acceptance	Kept, some language updated
27.3	27.3	Ordinance or regulations	Ordinance or regulations	Kept, some language updated
27.4	27.4	Administrative organization	Administrative organization	Kept, some language updated
27.5	27.5	Program activities	Program activities	Kept, some language updated
28	22	NAAQS	N/A	Moved rules and combined with Ch. 22.
				Rescinded Ch. 28. (Reserved)
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated  Rescinded Ch. 28. (Reserved)
		1	1	1
29	(New) 21	Opacity Qualifications	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21.
				Rescinded Ch. 29. (Reserved)
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated

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Previous Chapter	Current	Previous Title and	Current Title and	Actions Taken
•				ACTIONS Taken
Number (Prior to	Chapter	Description (Prior to 5/15/2024)	Description	
5/15/2024)	Number			
30	30	Fees	Fee	Kept
30.1	30.1	Purpose	Purpose	Kept, language updated
30.2	30.2	Fees associated with new source review	Fees associated with new source review	Kept, some language updated
50.2	30.2	applications	applications	Rept, some language apaated
30.3	30.3	Fees associated with asbestos demolition or	Fees associated with asbestos demolition or	Kept, some language updated
50.5	55.5	renovation notification	renovation notification	nepty some isinguage aparted
30.4	30.4	Fees associated with Title V operating permits	Fees associated with Title V operating permits	Kept, some language updated
		,		
30.5	30.5	Fee advisory groups	Fee advisory groups	Kept, language updated
30.6	30.6	Process to establish or adjust fees and	Process to establish or adjust fees and	Kept, some language updated
		notification of fee rates	notification of fee rates	
30.7	30.7	Fee revenue	Reserved	Language removed
31	31	Nonattainment Areas	Nonattainment New Source Review	Kept
31.1	31.1	Permit requirements relating to nonattainment	Permit requirements relating to nonattainment	Kept, some language updated
		areas	areas	
31.2	31.2	Conformity of general federal actions to the Iowa	Reserved	Language removed
		state implementation plan or federal		
		implementation plan - Rescinded		
31.3	31.3	Nonattainment new source review requirements	Nonattainment new source review (NNSR)	Kept, some language updated
		for areas designated nonattainment on or after	requirements for areas designated	
		May 18, 1998	nonattainment	
31.4	31.4	Preconstruction review permit program	Preconstruction review permit program	Kept
31.5 - 31.8	31.5 - 31.8	Reserved	Reserved	Kept
31.9	31.9	Actuals PALs	Actuals PALs	Kept, some language updated
31.10	31.10	Validity of rules	Validity of rules	Kept
31.11 - 31.19	N/A	Reserved	N/A	Rescinded and removed
31.20	N/A	Special requirements for nonattainment areas	N/A	Rescinded and removed
		designated before May 18, 1998		
32	N/A	AFO Field Study	N/A	Rescinded Ch. 32. (Reserved)
	<u> </u>	· · · · · · · · · · · · · · · · · · ·	-	
32.1	N/A N/A	Animal feeding operations field study  Definitions	N/A N/A	Rescinded, reserved, and language removed
32.2 32.3	N/A	Exceedance of the health effects value (HEV) for	N/A	Rescinded, reserved, and language removed
32.3	IN/A	hydrogen sulfide	IN/A	Rescinded, reserved, and language removed
32.4	N/A	Exceedance of the health effects standard (HES)	N/A	Rescinded, reserved, and language removed
32.4	IN/A	for hydrogen sulfide	IN/A	nescribed, reserved, and ranguage removed
32.5	N/A	Iowa Air Sampling Manual	N/A	Rescinded, reserved, and language removed
32.3	14//	Towarii Sampinig Manadi	14/1	neserraca, reservea, and language removed
33	33	Special regulations and construction permit	Construction permit requirements for major	Kent
		requirements for major stationary	stationary sources—Prevention of	nop.
		sources—Prevention of significant	significant deterioration (PSD)	
		=	significant deterioration (PSD)	
22.4	22.4	deterioration (PSD) of air quality		
33.1	33.1	Purpose	Purpose	Kept, some language updated
33.2 33.3	33.2	Reserved	Reserved	Kept Kept, some language updated
33.3	33.3	Special construction permit requirements for	PSD construction permit requirements for major	rept, some language upuated
		major stationary sources in areas designated attainment or unclassified (PSD)	stationary sources	
		attainment of unclassified (PSD)		
33.4 - 33.8	33.4 - 33.8	Reserved	Reserved	Kept
33.4 - 33.8	33.4 - 33.8	Plantwide applicability limitations (PALs)	Plantwide applicability limitations (PALs)	Kept, some language updated
33.10	33.10	Exceptions to adoption by reference	Exceptions to adoption by reference	Kept, some language updated  Kept, some language updated
IRM 06/19/2024	55.10	Exceptions to adoption by reference	Exceptions to adoption by reference	iceke, some militage ahnarea

33.10 | 33.10 | Exceptions to adoption by reference | Exceptions to adoption by reference | Kept, some language updated | JRM 06/19/2024

#### AQB Rule Tracking Crosswalk

34.306	N/A	Hg allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
<b>Previous Chapter</b>	Current	Previous Title and	Current Title and	Actions Taken
Number (Prior to 5/15/2024)	Chapter Number	Description (Prior to 5/15/2024)	Description	
34.307	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.308	N/A	Performance specifications - rescinded	N/A	Rescinded, reserved, and language removed

35	N/A	Grant Assistance Programs	N/A	Rescinded Ch. 35. (Reserved)
35.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
35.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
35.3	N/A	Role of the department of natural resources	N/A	Rescinded, reserved, and language removed
35.4	N/A	Eligible projects	N/A	Rescinded, reserved, and language removed
35.5	N/A	Forms	N/A	Rescinded, reserved, and language removed
35.6	N/A	Project selection	N/A	Rescinded, reserved, and language removed
35.7	N/A	Funding sources	N/A	Rescinded, reserved, and language removed
35.8	N/A	Type of financial assistance	N/A	Rescinded, reserved, and language removed
35.9	N/A	Term of loans	N/A	Rescinded, reserved, and language removed
35.10	N/A	Reduced award	N/A	Rescinded, reserved, and language removed
35.11	N/A	Fund disbursement limitations	N/A	Rescinded, reserved, and language removed
35.12	N/A	Applicant cost share	N/A	Rescinded, reserved, and language removed
35.13	N/A	Eligible costs	N/A	Rescinded, reserved, and language removed
35.14	N/A	Ineligible costs	N/A	Rescinded, reserved, and language removed
35.15	N/A	Written agreement	N/A	Rescinded, reserved, and language removed
35.16	N/A	Financial assistance denial	N/A	Rescinded, reserved, and language removed

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