

**Iowa Department of Natural Resources
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-009R2-M001

Expiration Date: August 26, 2023

Permit Renewal Application Deadline: February 26, 2023

EIQ Number: 92-2774

Facility File Number: 90-07-001

Responsible Official

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

For the Director of the Department of Natural Resources

Lori Hanson, 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
IAC.....	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
NSPS.....	new source performance standards
ppmv	parts per million by volume
scfm.....	standard cubic feet per minute
SIC	Standard Industrial Classification
TR	A Transformer-Rectifier set in an electrostatic precipitator
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
SO _x	Sulfur Oxides
NO _x	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
CO ₂	carbon dioxide
HAPs.....	hazardous air pollutants

I. Facility Description and Equipment List

Facility Name: IPL - Ottumwa Generating Station

Permit Number: 98-TV-009R2-M001

Facility Description: Electric Services (SIC 4911)

Equipment List

Emission Point Number	Associated Emission Unit Number	Associated Emission Unit Description	Iowa DNR Construction Permit
1	1	Boiler, Dry Bottom Tangentially Fired	78-A-019-P15
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 Stack/Reclaimer	N/A
12	12-14	Emergency Conveyor to Coal Pile	N/A
38	38-56	2 Lime Silos	99-A-174-S3
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-S4
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
94	94-36	Economizer Hydrovevor Fly Ash Separator	99-A-178-S2
98	98	Ash Pond Dredging	N/A
100	100	Coal Pile Bulldozing	N/A
200	200	Fly Ash Facility, West	05-A-613
201	200	Fly Ash Facility, East	05-A-614

Equipment List

Emission Point Number	Associated Emission Unit Number	Associated Emission Unit Description	Iowa DNR Construction Permit
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

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)
54-21	Sulfuric Acid Tank, East (3,200 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)
53	Plant Vacuum System
37	HX Auz Detraining Section of HX
12	FD Fan Lubricating Oil System
22	Fly Ash Silo
101	Ash Pile Bulldozing
102	Ash Pile Open Storage
103	550 Gallon Gasoline Tank
104	550 Gallon On-Road Diesel Tank
105	550 Gallon On Road Diesel Tank (NMC Site)
106	1,000 Gallon Diesel Tank (Alberici Construction Site)

II. Plant-Wide Conditions

Facility Name: IPL - Ottumwa Generating Station

Permit Number: 98-TV-009R2-M001

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

Permit Duration

The term of this permit is: 5 years

Commencing on: August 27, 2018

Ending on: August 26, 2023

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

Emission Limits

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

Opacity (visible emissions): 40% opacity

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

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

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

Particulate Matter:

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

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

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

Fugitive Dust: Attainment and Unclassified Areas - 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.

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].

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 C for the link of the Standard.

Authority for Requirements: 40 CFR 63, Subpart DDDDD

System-wide Consent Decree Requirements

Interstate Power and Light Company (IPL) has entered into a 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)]. The permittee shall comply with all applicable system-wide requirements in Appendix B – System-wide Consent Decree Requirements for IPL Facilities in Iowa.

Authority for Requirement: Iowa DNR Construction Permit 78-A-019-P15
567 IAC 22.108(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-009R2-M001

Emission Point ID Number: EP 1

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

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
1	Boiler #1 (Unit 1)	8,669 MMBTU/hr (726 MW, coal-fired)	SmartBurn® (CE 1A)
			Electrostatic Precipitator (ESP; CE 1) ⁽¹⁾
			Activated Carbon Injection (ACI; CE 1D)
			Selective Catalytic Reduction (SCR; CE 1E)
			Dry Flue Gas Desulfurization (DFGD; CE 1B)
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)

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

- 1) 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.
- 3) 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.
- 5) Standard is a thirty (30) day rolling average not including periods of SSM.
- 6) 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.
- 7) 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:
 - CO₂ = 1
 - CH₄ = 21
 - N₂O = 310

The CO₂ mass emissions shall be obtained from the required CMS and the mass emissions for methane (CH₄) and nitrous oxide (N₂O) shall be determined based on the most recent stack test results approved by the Department.

Authority for Requirement: DNR Construction Permit 78-A-019-P15

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 ⁶⁾
Particulate Matter (PM) – Federal	0.015 lb/MMBTU ⁷⁾	NA	NA
Sulfur Dioxide (SO ₂)	NA	0.075 lb/MMBTU	NA
Nitrogen Oxides (NO _x) [pre-SCR installation]	NA	0.210 lb/MMBTU ⁸⁾	0.160 lb/MMBTU ³⁾
Nitrogen Oxides (NO _x) [post-SCR installation]	NA	0.080 lb/MMBTU ⁹⁾	NA

- 1) Compliance with the emission limits listed in Consent Decree Emission Limits table shall be demonstrated through the use of Continuous Emission Monitoring Systems (CEMS). Please see Conditions 6 and 14 of DNR Construction Permit 78-A-019-P15 for the monitoring procedures to be used for each individual pollutant.
- 2) 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 twenty-three (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).
- 3) 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.
- 4) 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 twenty-nine (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.
- 5) As defined by Consent Decree Paragraph 75, a Unit Operating Day is any day on which the boiler fires a fossil fuel.
- 6) 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 twelve (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.
- 7) 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.
- 8) As required by Consent Decree Paragraph 93, the emission limit is in effect until thirty (30) Operating Days after December 31, 2019.
- 9) As required by Consent Decree Paragraph 93, the emission limit becomes effective thirty (30) Operating Days after December 31, 2019.

Authority for Requirement: DNR Construction Permit 78-A-019-P15

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 ²⁾	23.1(2)"a" ³⁾
Opacity ⁴⁾	20% ⁵⁾	23.1(2)"a" ³⁾
Sulfur Dioxide (SO ₂) ⁴⁾	520 ng/J heat input ⁶⁾	23.1(2)"a" ³⁾
Nitrogen Oxides (NO _x) ⁴⁾	300 ng/J heat input ⁷⁾	23.1(2)"a" ³⁾

- 1) Standard is expressed as the average of three (3) runs.
- 2) 43 ng/J = 0.10 lb/MMBTU. See 40 CFR §60.42(a)(1).
- 3) 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).
- 4) Compliance with the emission standards shall be demonstrated through the use of a CMS. See Condition 2 and Condition 6 for more information on compliance with the use of CMS.
- 5) 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).
- 6) 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:

$$PS_{SO_2} = \frac{ly(340)+z(520)}{y+z}$$

a. Where:

PS_{SO_2} = the prorated standard for SO₂ 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.

- Per 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.
Per 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 (3) hour period during which the average emissions [arithmetic average of three (3) contiguous one (1) hour periods] of SO₂ 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 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 SO₂ as measured by a CEMS exceed the applicable standard in 40 CFR §60.43. Facilities complying with the thirty (30) day SO₂ standard shall use the most current associated SO₂ 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.

- 7) 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:

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

Where:

PS_{NO_x} = 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.

- Per 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, per 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 (3) hour period during which the average emissions [arithmetic average of three (3) contiguous one (1) hour periods] of SO_2 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_x as measured by a CEMS exceed the applicable standard in 40 CFR §60.44. Facilities complying with the thirty (30) day NO_x standard shall use the most current associated NO_x compliance and monitoring requirements in 40 CFR §60.48Da and 40 CFR §60.49Da.

Authority for Requirement: DNR Construction Permit 78-A-019-P15

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 ¹⁾	tons/yr ²⁾	Other Limits	Reference/Basis
Particulate Matter (PM) – State	638.8 ³⁾	NA	NA	PSD "Synthetic Minor"
PM ₁₀	279.65 ⁴⁾	NA	NA	NAAQS
Sulfur Dioxide (SO ₂) ⁵⁾	NA	33,541 ³⁾	NA	PSD "Synthetic Minor"
Nitrogen Oxides (NO _x) ⁵⁾	NA	7,434.3 ⁶⁾	NA	PSD "Synthetic Minor"
Carbon Monoxide (CO) ⁵⁾	7,245.0 ^{4), 7)}	4,548 ⁸⁾	NA	NAAQS
Sulfuric Acid Mist (SAM, H ₂ SO ₄)	3.68 ⁹⁾	NA	NA	PSD Minor Increase

- 1) Standard is expressed as the average of three (3) stack test runs.
- 2) Standard is a 12-month rolling total.
- 3) 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.
- 4) 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.
- 5) Compliance with the emission standards shall be demonstrated through the use of a CEMS. See Condition 2 and Condition 6 for more information on compliance with the use of CEMS.
- 6) 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).
- 7) Standard is a one (1) hour standard.
- 8) Standard imposed as part of Project Number 09-511.
- 9) 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-P15

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

Pollutant: Nitrogen Oxides (NO_x) Annual, Nitrogen Oxides (NO_x) Ozone Season, Sulfur Dioxide (SO₂) Group 1

Emission Limits: Nitrogen Oxides and Sulfur Dioxide Allowances

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

Operational Limits & Requirements with Associated Monitoring and Recordkeeping

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

Federal Standards

A. New Source Performance Standards (NSPS):

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

Subpart	Title	Type	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, 303, 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)].

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 22.120 – 567 IAC 22.148). This emission unit is subject to the SO₂ allowance allocation, NO_x emission limitations, and monitoring provisions of the federal acid rain program.

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. Boiler #1 (EU 001) shall be limited to combusting the following fuels:
- Coal
 - Refined coal
 - #1 distillate oil
 - #2 distillate oil
 - Natural gas
 - switchgrass
- 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_x Combustion System (CE 1A). 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)].
- 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 100 lb/hr of 19% aqueous solution on an hourly average. The owner or operator shall:

- (1) Properly operate and maintain equipment to monitor 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 meter maintenance, calibration and replacement, and malfunctions.

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 H₂O – 8.0 inches H₂O (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 emission limits listed in Condition 10 of DNR Construction Permit 78-A-019-P15 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 in Condition 3 of DNR Construction Permit 78-A-019-P15. 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 Condition 3 of DNR Construction Permit 78-A-019-P15;
 - (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. As required by 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.
- Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in (1) – (3) above.
- T. As required by 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 5.S.(2) of DNR Construction Permit 78-A-019-P15. 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_x, 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.
- U. As required by 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 Condition 5.S. of this permit 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.
- V. As required by 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 Condition 5.S of DNR Construction Permit 78-A-019-P15. setting out the unit’s annual emissions during the calendar year that preceded submission of the report.
- W. 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 Condition 1b of DNR Construction Permit 78-A-019-P15 (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_x;
 - (b) The 30-day rolling average emission rate for SO₂;
 - (c) The 24-hour rolling average emission rate for PM; and
 - (d) The 12-month rolling average emission rate for NO_x.

Authority for Requirement: DNR Construction Permit 78-A-019-P15

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-P15

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

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

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
1	Boiler #1	8,669 MMBTU/hr	SmartBurn® (CE 1A)
			Electrostatic Precipitator (ESP; CE 1) ¹⁾
			Activated Carbon Injection (ACI; CE 1D)
			Selective Catalytic Reduction (SCR; CE 1E)
	Dry Flue Gas Desulfurization (DFGD; CE 1B)		
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)

¹⁾ Per Operating Requirements with Associated Monitoring and Recordkeeping, 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 of this permit without the ESP in operation.

Monitoring Requirements

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

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – Federal	CEMS ^{1), 2)}	Continuous	1 hour	40 CFR 60, Appendix A, Method 5
Opacity	COMS ^{1), 2)}	Continuous	1 hour	40 CFR 60, Appendix A, Method 9
SO ₂	CEMS ^{1), 2)}	Continuous	1 hour	40 CFR 60, Appendix A, Method 6C
NO _x	CEMS ^{1), 2)}	Continuous	1 hour	40 CFR 60, Appendix A, Method 7E
CO	CEMS ^{1), 2)}	Continuous	1 hour	40 CFR 60, Appendix A, Method 10
H ₂ SO ₄	Stack test	One-time	1 hour	40 CFR 60, Appendix A, Method 8
CO ₂	CEMS ^{1), 2)}	Continuous	1 hour	40 CFR 60, Appendix A, Method 3
CO ₂ e	Recordkeeping ³⁾	Rolling twelve (12) month total	N/A	N/A

1) CEMS = Continuous Emission Monitoring System and COMS = Continuous Opacity Monitoring System.

2) See Continuous Emissions Monitoring System for all CEMS and COMS requirements.

- 3) See Footnote 7 in Best Available Control Technology (BACT) Emission Limits for the recordkeeping requirements.

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.

- *SO₂:*
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 (SO₂) 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_x:*
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 nitrogen oxide (NO_x) 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 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 (O₂) or carbon dioxide (CO₂) content of the flue gases at each location where SO₂ or NO_x 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 under Condition 10a of DNR Construction Permit 78-A-019-P15.
- *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:
 - (a) 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.
 - (b) 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.
 - (c) 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:
 - (a) 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.
 - (b) 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% CO₂) will be applied to the PM rate data for any hours where the measured CO₂ 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:
 - (a) 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.
 - (b) Ensure performance specification tests on the PM CEMS are conducted.
 - (c) 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:
 - (a) 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.

(b) Conduct the condensable PM stack test using the reference methods and procedures set for in 40 CFR 51, Appendix M, Method 202.

(c) 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 Condition 6.A of DNR Construction Permit 78-A-019-P15 for SO₂, NO_x, CO, and either O₂ or CO₂ 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 SO₂ CEMS for the Consent Decree emission standards in this permit:

- (1) The owner or operator shall use SO₂ 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 SO₂ 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% CO₂) shall be applied to the SO₂ emission rate for any hours where the measured CO₂ 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_x CEMS for the Consent Decree emission standards in this permit:

- (1) The owner or operator shall use NO_x 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% CO₂) shall be applied to the NO_x emission rate for any hours where the measured CO₂ 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 SO₂, NO_x, CO, and CO₂ 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_x, SO₂, CO, or CO₂), the owner or operator shall substitute data by:
 - (I) For SO₂, CO (lb/hr and ton/yr), and CO₂:
 - (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:
 - (a) 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.
 - (b) For a missing data period greater than 24 hours, substitute the greater of:
 - The 90th 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:
 - (a) 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.
 - (b) For the missing data period of more than eight (8) hours, substitute the greater of:
 - The 95th 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.

(II) For NO_x:

(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:

(a) 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 6.E of DNR Construction Permit 78-A-019-P15.

(b) For a missing data period greater than 24 hours, substitute the greater of:

- The 90th 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 6.E of DNR Construction Permit 78-A-019-P15; 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:

(a) 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 6.E of DNR Construction Permit 78-A-019-P15.

(b) For the missing data period of more than eight (8) hours, substitute the greater of:

- The 95th 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 6.E of DNR Construction Permit 78-A-019-P15; 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.

G. The following procedure shall be used by the owner or operator to establish unit load ranges or operational bins for non-NSPS NO_x emission limits:

- (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_{ge})] 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_x 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_x 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_x 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_x emission rates (in lb/MMBTU) reported by the NO_x CEMS.
 - The 90th percentile value of hourly NO_x emission rates (in lb/ MMBTU).
 - The 95th percentile value of hourly NO_x emission rates (in lb/ MMBTU).
 - The maximum value of the hourly NO_x emission rates (in lb/ MMBTU).

- (4) Calculate all NO_x 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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

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

Emission Point ID Number: 2**Associated Equipment**

Associated Emission Unit ID Number: 2-6

Emission Unit vented through this Emission Point: 2-6
Emission Unit Description: Coal Pile, Open Storage Area
Raw Material/Fuel: Coal
Size: 30.3 acres

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 3**Associated Equipment**

Associated Emission Unit ID Number: 3-59
Emissions Control Equipment ID Number: CE 3-4
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 3-59
Emission Unit Description: West Rotary Car Dumper
Raw Material/Fuel: Coal
Rated Capacity: 3,500 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: 20% ⁽¹⁾

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

Authority for Requirement: Iowa DNR Construction Permit 78-A-096-S2
567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 15.0 lb/hr

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf, 15.0 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 78-A-096-S2
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

Federal Standards

New Source Performance Standards (NSPS):

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

EU ID	Subpart	Title	Type	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: 567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The 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: Iowa DNR Construction Permit 78-A-096-S2

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: Iowa 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.

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⁾ Yes No

⁽¹⁾ Compliance Assurance Monitoring (CAM) Plan is for EU 3-59 and EU 4-59 combined. Relevant requirements of CAM plan for this equipment are PM₁₀.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 4**Associated Equipment**

Associated Emission Unit ID Number: 4-59
Emissions Control Equipment ID Number: CE 3-4
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 4-59
Emission Unit Description: East Rotary Car Dumper
Raw Material/Fuel: Coal
Rated Capacity: 3,500 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: 20% ⁽¹⁾

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

Authority for Requirement: Iowa DNR Construction Permit 78-A-097-S3
567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 10.0 lb/hr

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf, 10.0 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 78-A-097-S3
567 IAC 23.3(2)"a"

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: Iowa 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.

Operational Limits & Requirements

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

Federal Standards

New Source Performance Standards (NSPS):

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

EU ID	Subpart	Title	Type	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: 567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The 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: Iowa DNR Construction Permit 78-A-097-S3

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? Yes No

Relevant requirements of CAM plan for this equipment: PM₁₀

Authority for Requirement: 567 IAC 22.108(3)

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

The facility shall develop procedures to implement this CAM plan within 15 days after the issuance date of this permit.

I. Background

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.: Iowa DNR Construction Permit 78-A-096-S2 & 78-A-097-S3
PM₁₀ 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 22.108(3)
40 CFR 64

Emission Point ID Number: 8

Associated Equipment

Associated Emission Unit ID Number: 8-60

Emissions Control Equipment ID Number: CE3

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: 8-60

Emission Unit Description: Coal Conveying Transfer House

Raw Material/Fuel: Coal

Rated Capacity: 3,500 Tons/Hour

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 10% ⁽¹⁾, 20%

Authority for Requirement: Iowa DNR Construction Permit 07-A-1357-P
567 IAC 23.1(2)"v" ⁽²⁾
40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 2.79 lb/hr

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.013 gr/dscf ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 07-A-1357-P
567 IAC 23.3(2)"a"

⁽¹⁾ BACT Emission Limit

⁽²⁾ IAC reference to NSPS Subpart Y (Standards of Performance for Coal Preparation Plants). See also 40 CFR §250 – 40 CFR §254.

Operational Limits & Requirements

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

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

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: Iowa DNR Construction Permit 07-A-1357-P

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

Monitoring Requirements

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

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?

Yes No

Relevant requirements of CAM plan for this equipment: PM₁₀

Authority for Requirement: 567 IAC 22.108(3)

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

The facility shall develop procedures to implement this CAM plan within 15 days after the issuance date of this permit.

I. Background

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.: Iowa DNR Construction Permit 07-A-1357-P
PM₁₀ 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 22.108(3)
40 CFR 64

Emission Point ID Number: 10

Associated Equipment

Associated Emission Unit ID Number: 10-61
Emissions Control Equipment ID Number: CE 4
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 10-61
Emission Unit Description: Coal Crusher House
Raw Material/Fuel: Coal
Rated Capacity: 1,100 Tons/Hour

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 10-A-329-P2
567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit: 3.24 lb/hr

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 4.0 lb/hr

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

Pollutant: State Particulate Matter (PM)

Emission Limit: 4.0 lb/hr.

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

BACT Emission Limits

Pollutant: Opacity

Emission Limit: 10%

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

Pollutant: Federal Particulate Matter (PM)

Emission Limit: 0.013 gr/dscf

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

Operational Limits & Requirements

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

A. New Source Performance Standards (NSPS):

- i. The following subparts apply to emission unit 10-61:

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
10-61	A	General Provisions	N/A	23.1(2)	§60.1 – §60.19
	Y	Standards of Performance for Coal Preparation Plants	Existing	23.1(2)"v"	§60.250 – §60.254

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

- i. The Coal Crusher House (EU 10-61) is not an affected emission unit under the federal standards for emission of hazardous air pollutants for source categories, as defined in 40 CFR Part 63, because there are no applicable categories at this time.

Authority for Requirement: 40 CFR 60, Subpart Y
567 IAC 23.1(2)"v"
Iowa DNR Construction Permit 10-A-329-P2

Operating Requirements with Associated Monitoring and Recordkeeping:

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall 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: Iowa DNR Construction Permit 10-A-329-P2

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: Iowa 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? Yes No

Relevant requirements of CAM plan for this equipment: PM₁₀, PM_{2.5}

Authority for Requirement: 567 IAC 22.108(3)

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

The facility shall develop procedures to implement this CAM plan within 15 days after the issuance date of this permit.

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.: Iowa DNR Construction Permit 10-A-329-P2
 - PM₁₀ Emission Limit: 4.0 lb/hr
 - PM_{2.5} 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 22.108(3)
40 CFR 64

Emission Point ID Number: 11**Associated Equipment**

Associated Emission Unit ID Number: 11-15

Emission Unit vented through this Emission Point: 11-15

Emission Unit Description: Coal Pile Stacker/Reclaimer

Raw Material/Fuel: Coal

Rated Capacity: 3,500 Tons/Hour

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 12**Associated Equipment**

Associated Emission Unit ID Number: 12-14

Emission Unit vented through this Emission Point: 12-14

Emission Unit Description: Emergency Conveyor to Coal Pile

Raw Material/Fuel: Coal

Rated Capacity: 3,500 Tons/Hour

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 38**Associated Equipment**

Associated Emission Unit ID Number: 38-56
Emissions Control Equipment ID Number: CE10
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 38-56
Emission Unit Description: Two (2) Lime Silos
Raw Material/Fuel: Lime
Rated Capacity: 30 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 99-A-174-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 99-A-174-S3
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

There are no operating limits or recordkeeping requirements on this unit at this time.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 71

Stack Opening (inches, dia.): 38.5

Exhaust Temperature (°F): Ambient

Exhaust Flowrate (scfm): 900

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 99-A-174-S3

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-56

Associated Equipment

Associated Emission Unit ID Numbers: 56-100

Emission Unit vented through this Emission Point: 56-100
Emission Unit Description: #2 Fuel Oil Tank West, Vertical Fixed Roof
Raw Material/Fuel: #2 Fuel Oil
Rated Capacity: 846,000 Gallons

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.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-57

Associated Equipment

Associated Emission Unit ID Numbers: 57-101

Emission Unit vented through this Emission Point: 57-101
Emission Unit Description: #2 Fuel Oil Tank East, Vertical Fixed Roof
Raw Material/Fuel: #2 Fuel Oil
Rated Capacity: 846,000 Gallons

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.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 67**Associated Equipment**

Associated Emission Unit ID Numbers: 67-34

Emission Unit vented through this Emission Point: 67-34

Emission Unit Description: Boiler for Plant Heat

Raw Material/Fuel: #1 and #2 Fuel Oil

Rated Capacity: 553 gal/hr (77.413 MMBtu/Hour)

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-816-S4
567 IAC 23.3(2)"d"

⁽¹⁾ 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).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 2.0 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 04-A-816-S4

Pollutant: State Particulate Matter (PM)

Emission Limit: 0.6 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 04-A-816-S4
567 IAC 23.3(2)"b"(2)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 04-A-816-S4
567 IAC 23.3(3)

Operational Limits & Requirements

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

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 Part 63, Subpart DDDDD

Operating Limits

Operating limits for this emission unit shall be:

- A. The Oil-Fired Boiler (EU 67-34) shall fire on No. 1 and/or No. 2 fuel oil only.
- B. The sulfur content of the fuel oil shall not exceed 0.1% (by weight).
- C. 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 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.
- D. The amount of fuel oil combusted in the Oil-Fired-Boiler (EU 67-34) shall not exceed 484,428 gallons per rolling twelve (12) month period.

Reporting & Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show compliance with the following requirements:

- A. The owner or operator shall keep a record of the sulfur content analysis of each shipment of fuel oil received or other supplier documentation showing the sulfur content of the fuel oil received.
- B. The owner or operator shall maintain the following monthly records:
 - 1. The amount of fuel oil combusted in the Oil-Fired Boiler (EU 67-34) and
 - 2. The rolling twelve (12) month total of the amount of fuel oil combusted in the Oil-Fired Boiler (EU 67-34).

Authority for Requirement: Iowa DNR Construction Permit 04-A-816-S4

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: Iowa DNR Construction Permit 04-A-816-S4

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 69

Associated Equipment

Associated Emission Unit ID Numbers: 69-31

Emission Unit vented through this Emission Point: 69-31
Emission Unit Description: NUVA Feeder Room (29 Fans)
Raw Material/Fuel: Fly Ash
Rated Capacity: 1.71 Tons/Hour

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 71**Associated Equipment**

Associated Emission Unit ID Number: 71-29

Emission Unit vented through this Emission Point: 71-29

Emission Unit Description: Welding Booth

Raw Material/Fuel: Welding Wire/Rods

Rated Capacity: 50 lbs/hour

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

567 IAC 23.3(2)"d"

⁽¹⁾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).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.20 lb/hr

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

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

567 IAC 23.3(2)"a"

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: Iowa DNR Construction Permit 04-A-817

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 72aAssociated Equipment

Associated Emission Unit ID Number: 72-27
Emissions Control Equipment ID Number: CE 72a
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 72-27
Emission Unit Description: West Side Coal Silo
Raw Material/Fuel: Coal
Rated Capacity: 550 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: Iowa DNR Construction Permit 18-A-121-P
567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 15.0 lb/hr

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 18-A-121-P
567 IAC 23.3(2)"a"

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	lb/hr	tons/yr	Other Limits	Reference/Basis
Particulate Matter (PM) – Federal (Filterable Only)	N/A	N/A	0.013 gr/dscf	567 IAC 33.3(2)
Opacity	N/A	N/A	10%	567 IAC 33.3(2)

Operational Limits & Requirements

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

Federal Standards

New Source Performance Standards (NSPS):

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

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
EU 72-27	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: 567 IAC 23.1(2) "v"
40 CFR 60, Subpart Y

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall 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: 567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y
Iowa DNR Construction Permit 18-A-121-P

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: Iowa 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.

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? Yes No

Relevant requirements of CAM plan for this equipment: PM₁₀

Authority for Requirement: 567 IAC 22.108(3)

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

The facility shall develop procedures to implement this CAM plan within 15 days after the issuance date of this permit.

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.: Iowa DNR Construction Permit 18-A-121-P

PM₁₀ 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 22.108(3)
40 CFR 64

Emission Point ID Number: 73aAssociated Equipment

Associated Emission Unit ID Number: 73-28
Emissions Control Equipment ID Number: CE 73a
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 73-28
Emission Unit Description: East Side Coal Silo
Raw Material/Fuel: Coal
Rated Capacity: 550 Tons/Hour

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

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

Pollutant: Opacity
Emission Limit: 20%
Authority for Requirement: Iowa DNR Construction Permit 18-A-122-P
567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM₁₀)
Emission Limit: 20.0 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 18-A-122-P

Pollutant: Particulate Matter (State)
Emission Limit: 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 18-A-122-P
567 IAC 23.3(2)"a"

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	lb/hr	tons/yr	Other Limits	Reference/Basis
Particulate Matter (PM) – Federal (Filterable Only)	N/A	N/A	0.014 gr/dscf	567 IAC 33.3(2)
Opacity	N/A	N/A	10%	567 IAC 33.3(2)

Operational Limits & Requirements

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

Federal Standards

New Source Performance Standards (NSPS):

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

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
EU 73-28	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: 567 IAC 23.1(2)"v"
40 CFR 60, Subpart Y

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall 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: Iowa DNR Construction Permit 18-A-122-P

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: Iowa 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.

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? Yes No

Relevant requirements of CAM plan for this equipment: PM₁₀

Authority for Requirement: 567 IAC 22.108(3)

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

The facility shall develop procedures to implement this CAM plan within 15 days after the issuance date of this permit.

I. Background

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.: Iowa DNR Construction Permit 18-A-122-P

PM₁₀ 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 22.108(3)
40 CFR 64

Emission Point ID Number: 75**Associated Equipment**

Associated Emission Unit ID Numbers: 23

Emission Unit vented through this Emission Point: 23
Emission Unit Description: Parts Washer, Main Building
Raw Material/Fuel: Parts Washing Solvent
Rated Capacity: 125 Gallons

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: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 99-A-175-S2

⁽¹⁾ An exceedence 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).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.257 lb/hr

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 99-A-175-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 0.50 tpy

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

Operational Limits & Requirements

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

Reporting & Recordkeeping

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on-site for at least five (5) years and shall be available for inspection by the IDNR

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: Iowa DNR Construction Permit 99-A-175-S2

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: Iowa DNR Construction Permit 99-A-175-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 78**Associated Equipment**

Associated Emission Unit ID Number: 78-18
Emissions Control Equipment ID Number: CE8
Emissions Control Equipment Description: Dust Collector

Emission Unit vented through this Emission Point: 78-18
Emission Unit Description: Cargill Coal Silo
Raw Material/Fuel: Coal
Rated Capacity: 350 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 567 IAC 23.1(2)"v"
Iowa DNR Construction Permit 04-A-818
40 CFR 60, Subpart Y

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.20 lb/hr

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"
Iowa DNR Construction Permit 04-A-818

Operational Limits & Requirements

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

NSPS Requirements:

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

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing

emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

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

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 79
Stack Opening (inches): 6 × 11
Exhaust Temperature (°F): 70
Exhaust Flowrate (scfm): 1,034
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 04-A-818

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No
Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(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.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 79

Associated Equipment

Associated Emission Unit ID Number: 79-18

Emission Unit vented through this Emission Point: 79-18
Emission Unit Description: Cargill Silo Truck Loading Chute
Raw Material/Fuel: Coal
Rated Capacity: 700 Tons/Hour

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 80**Associated Equipment**

Associated Emission Unit ID Number: 80-22

Emission Unit vented through this Emission Point: 80-22

Emission Unit Description: Fly Ash Silo Unloading Chute and C-Stone Production

Raw Material/Fuel: Fly Ash

Rated Capacity: 1,000 Tons/Hour

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 92**Associated Equipment**

Associated Emission Unit ID Number: 92-48

Emission Unit vented through this Emission Point: 92-48
Emission Unit Description: Emergency Generator Combustion Turbine
Raw Material/Fuel: Diesel Fuel
Rated Capacity: 88.7 Gallons/Hour, 1,200 hp

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⁾

⁽¹⁾ 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).

Authority for Requirement: Iowa 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: Iowa DNR Construction Permit 99-A-177-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: See footnote (3) below

Authority for Requirement: 567 IAC 23.1(2)"aa" ⁽²⁾⁽³⁾

⁽²⁾ State reference to NSPS Subpart GG

⁽³⁾ No fuel shall be combusted in this unit which exceeds 0.8 percent total sulfur by weight (40 CFR 60.333(b)).

Operational Limits & Requirements

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

NSPS

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. It is not subject to Subpart KKKK, *Standards of Performance for Stationary Combustion Turbines*, as it was constructed before February 18, 2005 and not subsequently modified or reconstructed.

Authority for Requirement: Iowa DNR Construction Permit 99-A-177-S1
40 CFR 60, Subpart GG
567 IAC 23.1(2)"aa"

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 twelve-month rolling period.
- C. Fuel combusted in the unit shall have a maximum sulfur content of 0.5 percent by weight.

Reporting & Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall 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 twelve-month 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: Iowa DNR Construction Permit 99-A-177-S1

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: Iowa DNR Construction Permit 99-A-177-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 94**Associated Equipment**

Associated Emission Unit ID Number: 94-36

Emission Unit vented through this Emission Point: 94-36

Emission Unit Description: Economizer Hydroveyor Fly Ash Separator

Raw Material/Fuel: Fly Ash

Rated Capacity: 15 Tons/Hour

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 99-A-178-S2

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.20 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 99-A-178-S2

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 99-A-178-S2

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

The facility shall operate the Fly Ash Hydroveyor according to manufacturer's specifications.

Authority for Requirement: Iowa DNR Construction Permit 99-A-178-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 219

Stack Opening (inches, dia): 12

Exhaust Temperature (°F): 70

Exhaust Flowrate (scfm): 374

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 99-A-178-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 98

Associated Equipment

Associated Emission Unit ID Number: 98

Emission Unit vented through this Emission Point: 98

Emission Unit Description: Ash Pond Dredging

Raw Material/Fuel: Ash

Rated Capacity: 20 Tons/Hour

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 100

Associated Equipment

Associated Emission Unit ID Number: 100

Emission Unit vented through this Emission Point: 100

Emission Unit Description: Coal Pile Bulldozing

Raw Material/Fuel: Coal

Rated Capacity: 2 Bulldozers/Hour

Applicable Requirements

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

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

Pollutant: Fugitive Dust

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 200**Associated Equipment**

Associated Emission Unit ID Number: 200
Emissions Control Equipment ID Number: CE200
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 200
Emission Unit Description: Fly Ash Facility West
Raw Material/Fuel: Fly Ash
Rated Capacity: 15 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.1(2)"d"
Iowa DNR Construction Permit 05-A-613

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 1.0 lb/hr

Authority for Requirement: 567 IAC 23.3(2)"c"
Iowa DNR Construction Permit 05-A-613

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf, 1.0 lb/hr ⁽²⁾

Authority for Requirement: 567 IAC 23.1(2)"a"
Iowa DNR Construction Permit 05-A-613

⁽²⁾ Emission limit set to ensure the project is not major for Prevention of Significant Deterioration (PSD) purposes.

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: Iowa DNR Construction Permit 05-A-613

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

Monitoring Requirements

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 201**Associated Equipment**

Associated Emission Unit ID Number: 200
Emissions Control Equipment ID Number: CE201
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 200
Emission Unit Description: Fly Ash Facility East
Raw Material/Fuel: Fly Ash
Rated Capacity: 15 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: 567 IAC 23.1(2)"d"
Iowa DNR Construction Permit 05-A-614

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 1.0 lb/hr

Authority for Requirement: 567 IAC 23.3(2)"c"
Iowa DNR Construction Permit 05-A-614

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf, 1.0 lb/hr ⁽²⁾

Authority for Requirement: 567 IAC 23.1(2)"a"
Iowa DNR Construction Permit 05-A-614

⁽²⁾ Emission limit set to ensure the project is not major for Prevention of Significant Deterioration (PSD) purposes.

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: Iowa DNR Construction Permit 05-A-614

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 202 (Internally Vented)

Associated Equipment

Associated Emission Unit ID Number: 202

Emission Unit vented through this Emission Point: 202
Emission Unit Description: Fly Ash Facility Truck Loadout
Raw Material/Fuel: Fly Ash
Rated Capacity: 75 Tons/Hour

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 05-A-615-S1

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 1.0 lb/hr

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf, 1.0 lb/hr

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

Iowa DNR Construction Permit 05-A-615-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 301

Associated Equipment

Associated Emission Unit ID Number: 301
Emissions Control Equipment ID Number: CE301
Emissions Control Equipment Description: Bin Vent Filter

Emission Unit vented through this Emission Point: 301
Emission Unit Description: Dry Flue Gas Desulfurization (DFGD) By-Product Silo
Raw Material/Fuel: DFGD By-Product
Rated Capacity: 2,841 Tons/Hour

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: No Visible Emissions

Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 11-A-641-S1

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit: 0.07 lb/hr

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.07 lb/hr

Authority for Requirement: Iowa 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: 567 IAC 23.3(2)"a"
Iowa DNR Construction Permit 11-A-641-S1

Operational Limits & Requirements

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

Operating Limits

Operating limits for this emission unit shall be:

- A. 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_x, 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.

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

Reporting & Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. 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: Iowa 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, dia): 8 x14

Exhaust Temperature (°F): 150

Exhaust Flowrate (scfm): 1,630

Discharge Style: Horizontal

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 306**Associated Equipment**

Associated Emission Unit ID Number: 306
Emissions Control Equipment ID Number: CE306
Emissions Control Equipment Description: Bin Vent Filter

Emission Unit vented through this Emission Point: 306
Emission Unit Description: Lime Silo
Raw Material/Fuel: Lime
Rated Capacity: 1,886 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: No Visible Emissions ⁽¹⁾

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

Iowa DNR Construction Permit 11-A-642-S1

⁽¹⁾ A "No VE" limit with opacity testing is required in lieu of compliance testing for PM, PM₁₀, and PM_{2.5}

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit: 0.07 lb/hr

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.07 lb/hr

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

Iowa DNR Construction Permit 11-A-642-S1

Operational Limits & Requirements

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

Operating Limits

Operating limits for this emission unit shall be:

- A. 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_x, 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.

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

Reporting & Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. 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: Iowa 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, dia): 8 x 14

Exhaust Temperature (°F): 70

Exhaust Flowrate (scfm): 1,550

Discharge Style: Horizontal

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice. Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 307**Associated Equipment**

Associated Emission Unit ID Number: 307
Emissions Control Equipment ID Number: CE 307
Emissions Control Equipment Description: Bin Vent Filter

Emission Unit vented through this Emission Point: 307
Emission Unit Description: Dry Flue Gas Desulfurization (DFGD) Recycle Product Silo
Raw Material/Fuel: DFGD Recycle Product
Rated Capacity: 540 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: No Visible Emissions ⁽¹⁾

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

Iowa DNR Construction Permit 11-A-643-S1

⁽¹⁾ A "No VE" limit with opacity testing is required in lieu of compliance testing for PM, PM10, and PM2.5.

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit: 0.04 lb/hr

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.04 lb/hr

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

Iowa DNR Construction Permit 11-A-643-S1

Operational Limits & Requirements

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

Operating Limits

Operating limits for this emission unit shall be:

- A. 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 NO_x, 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.

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

Reporting & Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. 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: Iowa 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, dia): 8 x14

Exhaust Temperature (°F): 150

Exhaust Flowrate (scfm): 1,045

Discharge Style: Horizontal

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 311**Associated Equipment**

Associated Emission Unit ID Number: 311
Emissions Control Equipment ID Number: CE 311
Emissions Control Equipment Description: Bin Vent Filter

Emission Unit vented through this Emission Point: 311
Emission Unit Description: Mercury Sorbent Silo
Raw Material/Fuel: Mercury Sorbent
Rated Capacity: 89 Tons/Hour

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

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

Pollutant: Opacity

Emission Limit: No Visible Emissions ⁽¹⁾

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

Iowa DNR Construction Permit 11-A-644-S1

⁽¹⁾ A "No VE" limit with opacity testing is required in lieu of compliance testing for PM, PM10, and PM2.5.

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit: 0.05 lb/hr

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.05 lb/hr

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

Iowa DNR Construction Permit 11-A-644-S1

Operational Limits & Requirements

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

Operating Limits

Operating limits for this emission unit shall be:

- A. 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_x, 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

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. 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: Iowa 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: Iowa DNR Construction Permit 11-A-644-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements. Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice. Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

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

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6-months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permits, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in *567 IAC 22.105(2)*. *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6-month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

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

G8. Duty to Provide Information

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

G9. General Maintenance and Repair Duties

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

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

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.

- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

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

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

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

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

G13. Hazardous Release

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

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall

be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

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

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

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

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

3. **Emergency Defense for Excess Emissions.** For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control

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

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

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

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

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

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

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

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

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

567 IAC 22.110(1)

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

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

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

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

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that does any of the following:

- i. Correct typographical errors
- ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

i. Do not violate any applicable requirement;

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;

iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

ii. The permittee's suggested draft permit;

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify.

However, if the permittee fails to comply with its proposed permit terms and conditions

during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

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

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

G19. Duty to Obtain Construction Permits

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

G20. Asbestos

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

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

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

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

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

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into

- interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

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

G25. Permit Shield

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

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

G26. Severability

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

G27. Property Rights

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

G28. Transferability

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

G29. Disclaimer

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

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

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

rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-9545

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

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

G31. Prevention of Air Pollution Emergency Episodes

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

567 IAC 26.1(1)

G32. Contacts List

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

Chief of Air Permits
U.S. EPA Region 7
Air Permits and Compliance Branch
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

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

Field Office 2

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

Field Office 3

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

Field Office 4

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

Field Office 5

7900 Hickman Road, Suite #200
Windsor Heights, IA 50324
(515) 725-0268

Field Office 6

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

Polk County Public Works Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health

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

VI. Appendix A: Acid Rain and CSAPR Conditions, 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_x Annual Trading Program, TR NO_x Ozone Season Trading Program and TR SO₂ Group 1 Trading Program.

Unit ID: 1 (ORIS Code: 6254)					
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 ₂ monitoring) and 40 CFR part 75, subpart H (for NO _x 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 NO_x Annual Trading Program), 97.530 through 97.535 (TR NO_x Ozone Season Trading Program), and 97.630 through 97.635 (TR SO₂ 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_x Annual Trading

Program), 97.535 (TR NO_x Ozone Season Trading Program) and/or 97.635 (TR SO₂ 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_x Annual Trading Program), 97.530 through 97.534 (TR NO_x Ozone Season Trading Program) and/or 97.630 through 97.634 (TR SO₂ 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_x Annual Trading Program), 97.535 (TR NO_x Ozone Season Trading Program) and/or 97.635 (TR SO₂ 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 <http://www.epa.gov/airmarkets/emissions/petitions.html>.

5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NO_x Annual Trading Program), 97.530 through 97.534 (TR NO_x Ozone Season Trading Program) and 97.630 through 97.634 (TR SO₂ 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_x 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_x Annual source and each TR NO_x 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 NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_x 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_x emissions requirements.

(1) TR NO_x 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_x Annual source and each TR NO_x Annual unit at the source shall hold, in the source's compliance account, TR NO_x 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_x emissions for such control period from all TR NO_x Annual units at the source.
- (ii). If total NO_x emissions during a control period in a given year from the TR NO_x Annual units at a TR NO_x Annual source are in excess of the TR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR NO_x Annual unit at the source shall hold the TR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - (B). The owners and operators of the source and each TR NO_x 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_x Annual assurance provisions.

- (i). If total NO_x emissions during a control period in a given year from all TR NO_x Annual units at TR NO_x 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_x 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_x 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 NO_x 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_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR NO_x 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_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the State during a control period in a given year exceed the state assurance level if

such total NO_x emissions exceed the sum, for such control period, of the state NO_x 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_x emissions from all TR NO_x Annual units at TR NO_x 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_x emissions from the TR NO_x Annual units at TR NO_x 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_x 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_x 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_x 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_x 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_x 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_x Annual allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR NO_x 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_x 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_x 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_x Annual allowance is a limited authorization to emit one ton of NO_x 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_x 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_x 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_x 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_x Annual source and each TR NO_x 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_x 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 AAAAA.
 - (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 Annual Trading Program.
- (2) The designated representative of a TR NO_x Annual source and each TR NO_x Annual unit at the source shall make all submissions required under the TR NO_x 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_x Annual Trading Program that applies to a TR NO_x Annual source or the designated representative of a TR NO_x Annual source shall also apply to the owners and operators of such source and of the TR NO_x Annual units at the source.
- (2) Any provision of the TR NO_x Annual Trading Program that applies to a TR NO_x Annual unit or the designated representative of a TR NO_x Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR NO_x 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_x Annual source or TR NO_x 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_x Ozone Season Trading Program Requirements (40 CFR 97.506)

(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 97.513 through 97.518.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_x Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_x Ozone Season 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 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

- (1) TR NO_x Ozone Season 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_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_x emissions for such control period from all TR NO_x Ozone Season units at the source.
 - (ii). If total NO_x emissions during a control period in a given year from the TR NO_x Ozone Season units at a TR NO_x Ozone Season source are in excess of the TR NO_x Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Ozone Season allowances required for deduction under 40 CFR 97.524(d); and
 - (B). The owners and operators of the source and each TR NO_x 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 BBBBB and the Clean Air Act.

(2) TR NO_x Ozone Season assurance provisions.

- (i). If total NO_x emissions during a control period in a given year from all TR NO_x Ozone Season units at TR NO_x Ozone Season 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_x 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_x Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(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 97.525(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such NO_x 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_x emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR NO_x Ozone Season 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_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Ozone Season units at TR NO_x Ozone Season 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_x Ozone Season 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_x Ozone Season 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 BBBBB and the Clean Air Act.
- (3) Compliance periods.
- (i). A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
 - (ii). A TR NO_x Ozone Season 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 97.530(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i). A TR NO_x Ozone Season 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_x Ozone Season allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR NO_x Ozone Season 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_x Ozone Season 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_x Ozone Season 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 BBBBB.
- (6) Limited authorization. A TR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x 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_x Ozone Season Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, 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_x Ozone Season 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_x Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.
 - (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, 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 97.506(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_x Ozone Season source and each TR NO_x Ozone Season 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 97.516 for the designated representative for the source and each TR NO_x Ozone Season 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 97.516 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.
 - (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 Trading Program.
- (2) The designated representative of a TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall make all submissions required under the TR NO_x Ozone Season Trading Program, except as provided in 40 CFR 97.518. 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_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season source or the designated representative of a TR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_x Ozone Season units at the source.
- (2) Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season unit or the designated representative of a TR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR NO_x Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Ozone Season source or TR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

TR SO₂ 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 SO₂ Group 1 source and each TR SO₂ 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 SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO₂ 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) SO₂ emissions requirements.

- (1) TR SO₂ 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 SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, TR SO₂ 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 SO₂ emissions for such control period from all TR SO₂ Group 1 units at the source.
 - (ii). If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (B). The owners and operators of the source and each TR SO₂ 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 SO₂ Group 1 assurance provisions.
 - (i). If total SO₂ emissions during a control period in a given year from all TR SO₂ Group 1 units at TR SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR SO₂ 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 SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ 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 SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ 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 SO₂ emissions from the TR SO₂ Group 1 units at TR SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
- (ii). A TR SO₂ 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 SO₂ 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 SO₂ 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 SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ Group 1 source and each TR SO₂ 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 SO₂ 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 SO₂ Group 1 Trading Program.
- (2) The designated representative of a TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall make all submissions required under the TR SO₂ 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 SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 source or the designated representative of a TR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the TR SO₂ Group 1 units at the source.
- (2) Any provision of the TR SO₂ Group 1 Trading Program that applies to a TR SO₂ Group 1 unit or the designated representative of a TR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR SO₂ 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 SO₂ Group 1 source or TR SO₂ 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: System-wide Consent Decree Requirements for IPL Facilities in Iowa

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:

<p>Burlington Generating Station Des Moines County</p> <ul style="list-style-type: none"> Unit 1 (212 MW, coal-fired) 	<p>Ottumwa Generating Station Wapello County</p> <ul style="list-style-type: none"> Unit 1 (726 MW, coal-fired)
<p>Dubuque Generating Station Dubuque County</p> <ul style="list-style-type: none"> Unit 1 (38 MW, fossil-fuel fired) Unit 5 (29 MW, fossil-fuel fired) Unit 6 (15 MW, fossil-fuel fired) 	<p>Sutherland Generating Station¹ Marshall County</p> <ul style="list-style-type: none"> Unit 1 (38 MW, fossil-fuel fired) Unit 2 (38 MW, fossil-fuel fired) Unit 3 (82 MW, fossil-fuel fired)
<p>Prairie Creek Generating Station Linn County</p> <ul style="list-style-type: none"> Boiler 1 (heat input of 245 MMBTU/hr, coal-fired) Boiler 2 (heat input of 304 MMBTU/hr, coal-fired) Unit 3 (50 MW, coal-fired) Unit 4 (149 MW, coal-fired) 	<p>Sixth Street Generating Station² Linn County</p> <ul style="list-style-type: none"> 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)
<p>Lansing Generating Station³ Allamakee County</p> <ul style="list-style-type: none"> Unit 1 (15 MW, coal-fired) Unit 2 (12 MW, coal-fired) Unit 3 (38 MW, coal-fired) Unit 4 (275 MW, coal-fired) 	<p>Milton L. Kapp (M.L. Kapp) Generating⁴ Station Clinton County</p> <ul style="list-style-type: none"> 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_x:

Calendar Year	System-wide Annual NO_x 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 SO₂:

Calendar Year	System-wide Annual SO₂ 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_x 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_x 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_x 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_x 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 SO₂ limits using the following procedures:

- (a) For system-wide annual tonnage limits the owner or operator shall use SO₂ emission data obtained from a CEMS in accordance with the procedures specified in 40 CFR Part 75. Once a unit is refueled the SO₂ 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_x Allowances:

- (a) As required by Consent Decree Paragraph 43, “NO_x Allowance” is defined as an authorization to emit a specific amount of NO_x 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_x 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_x allowances required to be surrendered pursuant to Consent Decree Paragraph 107 by June 30 of the immediately following calendar year. If any NO_x 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_x allowances and list the serial numbers of the transferred NO_x 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_x allowances and will not use any of the NO_x 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_x allowances, the owner or operator shall include a statement that the third-party recipient(s) surrendered the NO_x 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_x allowances to them. The owner or operator shall not have complied with the NO_x allowance surrender requirements of Consent Decree Paragraph 111 until all third-party recipient(s) have actually surrendered the transferred NO_x 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_x 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_x allowances to the EPA

Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such NO_x 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_x allowances are irrevocably authorized and that the source and location of the NO_x 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_x 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_x 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_x 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_x 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_x 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_x Allowances are permanent and are not subject to any termination provision of the Consent Decree.
- (2) NO_x 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_x 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_x;

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) SO₂ Allowances:

- (a) As required by Consent Decree Paragraph 66, “SO₂ Allowance” is defined as an authorization to emit a specified amount of SO₂ 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 “SO₂ 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 SO₂ allowances required to be surrendered pursuant to Consent Decree Paragraph 131 by June 30 of the immediately following calendar year. If any SO₂ 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 SO₂ allowances and list the serial numbers of the transferred SO₂ 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 SO₂ allowances and will not use any of the SO₂ allowances to meet any obligation imposed by any environmental law.
 - (iii) No later than the third periodic report due after the transfer of any SO₂ allowances, the owner or operator shall include a statement that the third-party recipient(s) surrendered the SO₂ 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 SO₂ allowances to them. The owner or operator shall not have complied with the SO₂ allowance surrender requirements of Consent Decree Paragraph 135 until all third-party recipient(s) have actually surrendered the transferred SO₂ 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 SO₂ 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 SO₂ allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such SO₂ 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 SO₂ allowances are irrevocably authorized and that the source and location of the SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ Allowances are permanent and are not subject to any termination provision of the Consent Decree.
- (4) SO₂ 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 SO₂ 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 SO₂ 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 SO₂;provided the owner or operator is also in compliance for the calendar year with all emission limitations for SO₂ 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 SO₂, NO_x, and PM emissions; and
 - (c) The obligation to surrender NO_x and SO₂ allowances.

- (2) Emission reporting and allowance accounting information necessary to determine super-compliant NO_x and SO₂ 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.

VII. Appendix C: Weblinks to Standards

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: <https://www3.epa.gov/ttn/atw/utility/epa-hq-oar-2911-0044-draft-5819-1.pdf>

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/cgi-bin/text-idx?node=sp40.7.60.y>

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/cgi-bin/text-idx?node=sp40.14.63.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/cgi-bin/text-idx?node=sp40.15.63.uuuuu>
