Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: **IPL –Burlington Generating Station**
Facility Location: **4282 Sullivan Slough Road**
Burlington, IA 52601
Air Quality Operating Permit Number: 98-TV-023R1-M003
Expiration Date: July 29, 2009

EIQ Number: 92-2773
Facility File Number: 29-01-013

Responsible Official

Name:	**Richard Sublett**
Title:	**Plant Manager**
Mailing Address:	**4282 Sullivan Slough Road**
	Burlington, IA 52601
Phone #:	**319-758-5300**

Permit Contact Person for the Facility

Name:	**Richard Sublett**
Title:	**Plant Manager**
Mailing Address:	**4282 Sullivan Slough Road**
	Burlington, IA 52601
Phone #:	**319-758-5300**

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

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Douglas A. Campbell, Supervisor of Air Operating Permits Section Date

Table of Contents

I. Facility Description and Equipment List **4**

II. Plant - Wide Conditions **6**

III. Emission Point Specific Conditions **9**

IV. General Conditions **79**

G1. Duty to Comply
G2. Permit Expiration
G3. Certification Requirement for Title V Related Documents
G4. Annual Compliance Certification
G5. Semi-Annual Monitoring Report
G6. Annual Fee
G7. Inspection of Premises, Records, Equipment, Methods and Discharges
G8. Duty to Provide Information
G9. General Maintenance and Repair Duties
G10. Recordkeeping Requirements for Compliance Monitoring
G11. Evidence used in establishing that a violation has or is occurring.
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification
G13. Hazardous Release
G14. Excess Emissions and Excess Emissions Reporting Requirements
G15. Permit Deviation Reporting Requirements
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification
G18. Duty to Modify a Title V Permit
G19. Duty to Obtain Construction Permits
G20. Asbestos
G21. Open Burning
G22. Acid Rain (Title IV) Emissions Allowances
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
G24. Permit Reopenings
G25. Permit Shield
G26. Severability
G27. Property Rights
G28. Transferability
G29. Disclaimer
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
G31. Prevention of Air Pollution Emergency Episodes
G32. Contacts List

V. Appendix A: CAM Plan for Main Plant Boiler (EU 17) **93**

VI. Appendix B: Acid Rain Phase II Permit **104**

Abbreviations

acfm.....actual cubic feet per minute
CE .....control equipment
CEM.....continuous emission monitor
CFR.....Code of Federal Regulation
EP.....emission point
EU .....emission unit
^{o}F .....degrees Fahrenheit
EIQ.....emissions inventory questionnaire
gr./dscf .....grains per dry standard cubic foot
gr./100 cf.....grains per one hundred cubic feet
IAC.....Iowa Administrative Code
IDNR.....Iowa Department of Natural Resources
MVAC.....motor vehicle air conditioner
NAICS.....North American Industry Classification System
NSPS.....new source performance standard
ppmv .....parts per million by volume
lb./hr.....pounds per hour
lb./MMBtu .....pounds per million British thermal units
SCC.....Source Classification Codes
scfm.....standard cubic feet per minute
SIC .....Standard Industrial Classification
TPY .....Tons per year
USEPA.....United States Environmental Protection Agency

Pollutants
PM.....particulate matter
PM_{10} .....particulate matter ten microns or less in diameter
SO_2 .....sulfur dioxide
NO_x .....nitrogen oxides
VOC.....volatile organic compound
CO.....carbon monoxide
HAP.....hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: IPL –Burlington Generating Station
Permit Number: 98-TV-023R1-M003

Facility Description: Electrical Services (SIC 4911)

Equipment List

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description	IDNR Construction Permit Number
EP 01	EU 01	Combustion Turbine #1	92-A-569-S3
	EU 01A	Diesel Starter Engine for CT #1	
EP 02	EU 02	Combustion Turbine #2	92-A-570-S3
	EU 02A	Diesel Starter Engine for CT #2	
EP 03	EU 03	Combustion Turbine #3	92-A-571-S3
	EU 03A	Diesel Starter Engine for CT #3	
EP 04	EU 04	Combustion Turbine #4	92-A-572-S3
	EU 04A	Diesel Starter Engine for CT #4	
EP 13	EU 13	Emergency Stationary RICE Generator	05-A-934
EP 16	EU 16	House Heat Boiler	00-A-859
EP 17	EU 17	Main Plant Boiler	93-A-390-S7
EP 18	EU 18	Ash Hydroveyor	N/A
EP 18-1	EU 18-1	Ash Hydroveyor	N/A
EP 19	EU 19	Dry Fly Ash Primary Vacuum Producer	95-A-597-S2
EP 19-1	EU 19-1	Dry Fly Ash Backup Vacuum Producer	97-A-127-S1
EP 20	EU 20	Fly Ash Storage Silo	97-A-126
EP 20A	EU 20A	Fly Ash Unloading	N/A
EP 20B	EU 20B	Fly Ash Loadout – C-Stone Production	N/A
EP 22	EU 22	Fuel Oil Tank (10,000 gallons)	N/A
EP 23	EU 23	Fuel Oil Tank (10,000 gallons)	N/A
EP 25	EU 25	Coal Galley	93-A-386-S1
EP 25A		Coal Galley (Fugitive)	N/A
EP 26	EU 26	Coal Pile	N/A
EP 27	EU 27	Coal Dumper House (Track Hoppers)	93-A-389-S1
EP 28	EU 28	Coal Reclaim Tripper (Fugitive)	N/A
EP 29	EU 29	Barge Hopper	N/A
EP 30	EU 30	Crusher (Fugitive)	N/A
	EU 38	Crusher House Conveyor (Fugitive)	N/A

Equipment List (continued)

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description	IDNR Construction Permit Number
EP 31	EU 31	Transfer Equipment (Fugitive)	N/A
	EU 37	Transfer House Conveyor (Fugitive)	N/A
EP 40	EU 40	Reclaim Hopper	93-A-388-S2
EP 40A		Reclaim Hopper (Fugitive)	N/A
EP 100	EU 30	Crusher	93-A-387-S2
	EU 38	Crusher House Conveyor	
	EU 31	Transfer Equipment	
	EU 37	Transfer House Conveyor	

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU 05	Turbine Lube Oil Vent #1
EU 07	Turbine Lube Oil Vent #2
EU 09	Turbine Lube Oil Vent #3
EU 11	Turbine Lube Oil Vent #4
EU 20c	C-Stone Pile & Delivery
EU 39a	Gasoline Storage Tank (300 gallons)
EU 42	Welding Booth
EU 43	Parts Washer
EU 44	Natural Gas Heater (indirect, 2 mmBtu/hr, burn natural gas)

II. Plant-Wide Conditions

Facility Name: IPL – Burlington Generating Station
Permit Number: 98-TV-023R1-M003

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

Permit Duration

The term of this permit is: Five (5) years
Commencing on: July 30, 2004
Ending on: July 29, 2009

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 (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)[1]:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

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

Particulate Matter [2]:
The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.
Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

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

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

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

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

Unless otherwise noted in Section III of this permit, IPL – Burlington Generating Station is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, IPL – Burlington Generating Station shall comply with such requirements in a timely manner.

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

Authority for Requirement: 567 IAC 22.108(15)

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40 CFR 63 Subpart YYYY Requirements

This facility is subject to National Emission Standard for Hazardous Air Pollutants for Stationary Combustion Turbines – 40 CFR 63 subpart YYYY per 40 CFR 63.6090, and the affected units are EU 01, EU 02, EU 03, and EU 04. However, per 40 CFR 63.6090(b)(4), those existing combustion turbines (which existed before January 14, 2003 per 40 CFR 63.6090(a)(1)) do not have to meet the requirements of subpart YYYY and subpart A of part 63.

Authority for Requirement: 40 CFR 63 Subpart YYYY

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40 CFR 63 Subpart DDDDD Requirements

This facility is subject to National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters – 40 CFR 63 Subpart DDDDD. The subpart was signed on February 26, 2004, and the effective date is November 12, 2004. The affected unit is EU 16 (House Heat Boiler). The requirements of subpart DDDDD are incorporated into the Emission Point-Specific Conditions section.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

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40 CFR 63 Subpart ZZZZ Requirements

This facility is subject to National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines – 40 CFR 63 Subpart ZZZZ. The affected unit is EU 13 (Emergency Stationary RICE Generator). The requirements of subpart ZZZZ are incorporated into the Emission Point-Specific Conditions section.

Authority for Requirement: 40 CFR 63 Subpart ZZZZ

III. Emission Point-Specific Conditions Revised 11/30/2006 JAI

Facility Name: IPL – Burlington Generating Station
Permit Number: 98-TV-023R1-M003

Emission Point ID Number: EP 01

Associated Equipment

Associated Emission Unit ID Numbers: EU 01 and EU 01A

Emission Unit vented through this Emission Point: EU 01
Emission Unit Description: Combustion Turbine #1
Raw Material/Fuel: Natural Gas and Fuel Oil
Rated Capacity: 288 MMBtu/hr

Emission Unit vented through this Emission Point: EU 01A
Emission Unit Description: Diesel Starter Engine for CT #1
Raw Material/Fuel: Fuel Oil
Rated Capacity: 40 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 40% [(1)]
Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR PSD Construction Permit 92-A-569-S3

[(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: PM_{10}
Emission Limits for Natural Gas only: 4.8 lb/hr
Emission Limits for Fuel Oil only: 12.5 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 4.32 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3

Pollutant: Particulate Matter (PM)
Emission Limits for Natural Gas only: 4.8 lb/hr
Emission Limits for Fuel Oil only: 12.5 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 4.32 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits for Natural Gas only: 1.8 lb/hr
Emission Limits for Fuel Oil only: 8.8 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 2.81 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3

Pollutant: Nitrogen Oxides (NO_x)
Emission Limits: 95.0 lb/hr, 41.33 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3

Pollutant: Volatile Organic Compounds (VOCs)
Emission Limits: 13.9 lb/hr, 6.05 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3

Pollutant: Carbon Monoxide (CO)
Emission Limits: 38.4 lb/hr, 16.70 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3

Operational Limits & Requirements

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

Operating Limits:

A. This turbine shall be fired by natural gas or fuel oil #1 or #2 only.
B. This turbine shall be operated a maximum of 7 hours and 15 minutes per day when fired by fuel oil.
C. This turbine shall be operated a maximum of 200 hours per rolling 12 month period when fired by fuel oil.
D. This turbine shall be operated a maximum of 850 hours per rolling 12 month period.
E. The sulfur content of any fuel fired in this turbine shall not exceed 0.5% by weight.
F. The inlet fogger on this turbine is allowed to operate anytime the turbine is in operation.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3

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

A. Record the number of hours this turbine is fired by each fuel. Calculate and record daily, monthly and rolling 12-month totals.
B. Record the sulfur content of any fuel fired in this turbine, in weight percent.
C. Determine compliance with the NOx and SO_2 limits cited above by applying the latest emission factors with the amount of fuel consumed for each turbine. Calculate and record monthly and 12 month rolling totals.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3

NSPS Subpart GG Requirements:
This combustion turbine is subject to Subpart A (General Provisions) and Subpart GG (Standards of Performance for Stationary Gas Turbines) of the New Source Performance Standards (NSPS) with respect to the testing of fuels for sulfur content as required by 40 CFR 60.334 and 60.335.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-569-S3
567 IAC 23.1(2)"aa"
40 CFR 60 subpart GG

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 37
Stack Opening (inches): 96×120
Exhaust Temperature (^oF): 960
Exhaust Flowrate (scfm): 144,350
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 92-A-569-S3

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

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

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 02

Associated Equipment

Associated Emission Unit ID Numbers: EU 02 and EU 02A

Emission Unit vented through this Emission Point: EU 02
Emission Unit Description: Combustion Turbine #2
Raw Material/Fuel: Natural Gas and Fuel Oil
Rated Capacity: 288 MMBtu/hr

Emission Unit vented through this Emission Point: EU 01A
Emission Unit Description: Diesel Starter Engine for CT#2
Raw Material/Fuel: Fuel Oil
Rated Capacity: 40 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 40% [(1)]
Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR PSD Construction Permit 92-A-570-S3

[(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: PM_{10}
Emission Limits for Natural Gas only: 4.8 lb/hr
Emission Limits for Fuel Oil only: 12.5 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 4.32 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-570-S3

Pollutant: Particulate Matter
Emission Limits for Natural Gas only: 4.8 lb/hr
Emission Limits for Fuel Oil only: 12.5 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 4.32 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 92-A-570-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits for Natural Gas only: 1.8 lb/hr
Emission Limits for Fuel Oil only: 8.8 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 2.81 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 92-A-570-S3

Pollutant: Nitrogen Oxides (NO_x)
Emission Limits: 95.0 lb/hr, 41.33 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-570-S3

Pollutant: Volatile Organic Compounds (VOCs)
Emission Limits: 13.9 lb/hr, 6.05 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-570-S3

Pollutant: Carbon Monoxide (CO)
Emission Limits: 38.4 lb/hr, 16.70 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-570-S3

Operational Limits & Requirements

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

Operating Limits:

A. This turbine shall be fired by natural gas or fuel oil #1 or #2 only.
B. This turbine shall be operated a maximum of 7 hours and 15 minutes per day when fired by fuel oil.
C. This turbine shall be operated a maximum of 200 hours per rolling 12 month period when fired by fuel oil.
D. This turbine shall be operated a maximum of 850 hours per rolling 12 month period.
E. The sulfur content of any fuel fired in this turbine shall not exceed 0.5% by weight.
F. The inlet fogger on this turbine is allowed to operate anytime the turbine is in operation.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-570-S3

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. Record the number of hours this turbine is fired by each fuel. Calculate and record daily, monthly and rolling 12 month totals.
B. Record the sulfur content of any fuel fired in this turbine, in weight percent.
C. Determine compliance with the NOx and SO_2 limits cited above by applying the latest emission factors with the amount of fuel consumed for each turbine. Calculate and record monthly and 12 month rolling totals.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-570-S3

NSPS Subpart GG Requirements:

This combustion turbine is subject to Subpart A (General Provisions) and Subpart GG (Standards of Performance for Stationary Gas Turbines) of the New Source Performance Standards (NSPS) with respect to the testing of fuels for sulfur content as required by 40 CFR 60.334 and 60.335.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-570-S3
567 IAC 23.1(2)"aa"
40 CFR 60 subpart GG

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 37
Stack Opening (inches): 96×120
Exhaust Temperature (^{o}F): 960
Exhaust Flowrate (scfm): 144,350
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-570-S3

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

Monitoring Requirements

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

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 03

Associated Equipment

Associated Emission Unit ID Numbers: EU 03 and EU 03A

Emission Unit vented through this Emission Point: EU 03
Emission Unit Description: Combustion Turbine #3
Raw Material/Fuel: Natural Gas and Fuel Oil
Rated Capacity: 288 MMBtu/hr

Emission Unit vented through this Emission Point: EU 03A
Emission Unit Description: Diesel Starter Engine for CT #3
Raw Material/Fuel: Fuel Oil
Rated Capacity: 40 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 40% [(1)]
Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR PSD Construction Permit 92-A-571-S3

[(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: PM_{10}
Emission Limits for Natural Gas only: 4.8 lb/hr
Emission Limits for Fuel Oil only: 12.5 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 4.32 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

Pollutant: Particulate Matter
Emission Limits for Natural Gas only: 4.8 lb/hr
Emission Limits for Fuel Oil only: 12.5 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 4.32 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits for Natural Gas only: 1.8 lb/hr
Emission Limits for Fuel Oil only: 8.8 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 2.81 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

Pollutant: Nitrogen Oxides (NO_x)
Emission Limits: 95.0 lb/hr, 41.33 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

Pollutant: Volatile Organic Compounds (VOCs)
Emission Limits: 13.9 lb/hr, 6.05 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

Pollutant: Carbon Monoxide (CO)
Emission Limits: 38.4 lb/hr, 16.70 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

Operational Limits & Requirements

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

Operating Limits:

A. This turbine shall be fired by natural gas or fuel oil #1 or #2 only.
B. This turbine shall be operated a maximum of 7 hours and 15 minutes per day when fired by fuel oil.
C. This turbine shall be operated a maximum of 200 hours per rolling 12 month period when fired by fuel oil.
D. This turbine shall be operated a maximum of 850 hours per rolling 12 month period.
E. The sulfur content of any fuel fired in this turbine shall not exceed 0.5% by weight.
F. The inlet fogger on this turbine is allowed to operate anytime the turbine is in operation.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. Record the number of hours this turbine is fired by each fuel. Calculate and record daily, monthly and rolling 12 month totals.
B. Record the sulfur content of any fuel fired in this turbine, in weight percent.
C. Determine compliance with the NOx and SO_2 limits cited above by applying the latest emission factors with the amount of fuel consumed for each turbine. Calculate and record monthly and 12 month rolling totals.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

NSPS Subpart GG Requirements:

This combustion turbine is subject to Subpart A (General Provisions) and Subpart GG (Standards of Performance for Stationary Gas Turbines) of the New Source Performance Standards (NSPS) with respect to the testing of fuels for sulfur content as required by 40 CFR 60.334 and 60.335.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3
567 IAC 23.1(2)"aa"
40 CFR 60 subpart GG

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 37
Stack Opening (inches): 96×120
Exhaust Temperature (^{o}F): 960
Exhaust Flowrate (scfm): 144,350
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-571-S3

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

Monitoring Requirements

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

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 04

Associated Equipment

Associated Emission Unit ID Numbers: EU 04 and EU 04A

Emission Unit vented through this Emission Point: EU 04
Emission Unit Description: Combustion Turbine #4
Raw Material/Fuel: Natural Gas and Fuel Oil
Rated Capacity: 288 MMBtu/hr

Emission Unit vented through this Emission Point: EU 04A
Emission Unit Description: Diesel Starter Engine for CT #4
Raw Material/Fuel: Fuel Oil
Rated Capacity: 40 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 40% [(1)]
Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR PSD Construction Permit 92-A-572-S3

[(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: PM_{10}
Emission Limits for Natural Gas only: 4.8 lb/hr
Emission Limits for Fuel Oil only: 12.5 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 4.32 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

Pollutant: Particulate Matter
Emission Limits for Natural Gas only: 4.8 lb/hr
Emission Limits for Fuel Oil only: 12.5 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 4.32 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits for Natural Gas only: 1.8 lb/hr
Emission Limits for Fuel Oil only: 8.8 lb/hr
Annual Emission Limits for Natural Gas and Fuel Oil combined: 2.81 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

Pollutant: Nitrogen Oxides (NO_x)
Emission Limits: 95.0 lb/hr, 41.33 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

Pollutant: Volatile Organic Compounds (VOCs)
Emission Limits: 13.9 lb/hr, 6.05 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

Pollutant: Carbon Monoxide (CO)
Emission Limits: 38.4 lb/hr, 16.70 tons/yr
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

Operational Limits & Requirements

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

Operating Limits:

A. This turbine shall be fired by natural gas or fuel oil #1 or #2 only.
B. This turbine shall be operated a maximum of 7 hours and 15 minutes per day when fired by fuel oil.
C. This turbine shall be operated a maximum of 200 hours per rolling 12 month period when fired by fuel oil.
D. This turbine shall be operated a maximum of 850 hours per rolling 12 month period.
E. The sulfur content of any fuel fired in this turbine shall not exceed 0.5% by weight.
F. The inlet fogger on this turbine is allowed to operate anytime the turbine is in operation.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. Record the number of hours this turbine is fired by each fuel. Calculate and record daily, monthly and rolling 12 month totals.
B. Record the sulfur content of any fuel fired in this turbine, in weight percent.
C. Determine compliance with the NOx and SO_2 limits cited above by applying the latest emission factors with the amount of fuel consumed for each turbine. Calculate and record monthly and 12 month rolling totals.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

NSPS Subpart GG Requirements:

This combustion turbine is subject to Subpart A (General Provisions) and Subpart GG (Standards of Performance for Stationary Gas Turbines) of the New Source Performance Standards (NSPS) with respect to the testing of fuels for sulfur content as required by 40 CFR 60.334 and 60.335.

Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3
567 IAC 23.1(2)"aa"
40 CFR 60 subpart GG

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 37
Stack Opening (inches): 96×120
Exhaust Temperature (^{o}F): 960
Exhaust Flowrate (scfm): 144,350
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR PSD Construction Permit 92-A-572-S3

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

Monitoring Requirements

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

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 13

Associated Equipment

Associated Emission Unit ID Number: EU 13

Emission Unit vented through this Emission Point: EU 13
Emission Unit Description: Emergency Stationary RICE Generator
Raw Material/Fuel: Fuel Oil
Rated Capacity: 602 bhp (400 kW)

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 40% [(1)]
Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR PSD Construction Permit 05-A-934

[(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: PM_{10}
Emission Limits: 0.57 lb/hr
Authority for Requirement: Iowa DNR PSD Construction Permit 05-A-934

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/dscf, 0.57 lb/hr
Authority for Requirement: 567 IAC 23.3(2)"a"
Iowa DNR PSD Construction Permit 05-A-934

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits: 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)
Iowa DNR PSD Construction Permit 05-A-934

Operational Limits & Requirements

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

Hours of operation:

1. This emergency generator shall not operate more than 876 hours per rolling twelve-month period and only for emergency situations.

Authority for Requirement: Iowa DNR PSD Construction Permit 05-A-934

Process throughput:

1. The Sulfur content of the fuel shall not exceed 0.5% by weight.

Authority for Requirement: Iowa DNR PSD Construction Permit 05-A-934

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall record the amount of time this generator operates each time this generator is operated. Calculate a monthly and rolling twelve-month total.

2. The owner or operator shall provide a vendor certification of the Sulfur content of the fuel oil used in this generator.

3. The owner or operator shall submit the initial notification requirements of 63.6645(d) to the appropriate authority.

Authority for Requirement: Iowa DNR PSD Construction Permit 05-A-934
567 IAC 23.1(3)"cz"
40 CFR 63 Subpart ZZZZ: Stationary Reciprocating Internal Combustion Engines.

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 16

Associated Equipment

Associated Emission Unit ID Number: EU 16

Emission Unit vented through this Emission Point: EU 16
Emission Unit Description: House Heat Boiler
Raw Material/Fuel: Natural Gas
Rated Capacity: 15 MMBtu/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 40%[1]
Authority for Requirement: 567 IAC 23.3(2)"d" (Iowa DNR Construction Permit 00-A-859)

[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 (PM)
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b" (Iowa DNR Construction Permit 00-A-859)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e" (Iowa DNR Construction Permit 00-A-859)

40 CFR 63 Subpart DDDDD Requirements

This unit is subject to National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters – 40 CFR 63 Subpart DDDDD. Per 40 CFR 63.7506(b) and (b)(2), EU 16 (House Heat Boiler) is subject to only the initial notification requirements in 40 CFR 63.9(b) which shall be submitted not later than 120 calendar days after November 12, 2004. The information that must be included in the initial notification is specified in 40 CFR 63.7545(b).

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Operational Limits & Requirements

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

NSPS Requirement:

This emission unit is subject to Subpart A (General Provisions) and Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) of the New Source Performance Standards (NSPS). The specific requirements are included in the Operating Limits and Reporting & Record Keeping. These sections include the alternative (i.e., reduced) recordkeeping and reporting requirements allowed by EPA Region VII. Failure to specifically include all of the requirements of the NSPS in this permit does not relieve the owner or operator of those requirements.

Operating Limits:

A. This emission unit shall use natural gas only.

B. The owner or operator shall send a certification to the Department stating that this emission unit will burn only natural gas.

Reporting & Record Keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. The amount of fuel used on a monthly basis.

B. A copy of all excess emission reports required for Subpart Dc. Per the reduced recordkeeping for Subpart Dc the facility may report excess emissions (or lack thereof) on an annual frequency. It should be noted that the facility is also required to orally notify the DNR field office of excess emissions within 8 hours and submit a written report within 7 days.

Authority for Requirement: Iowa DNR Construction Permit 00-A-859
567 IAC 23.1(2)"lll"
40 CFR 60 subpart Dc

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 171.8
Stack Opening (inches, dia.): 23
Exhaust Temperature (^{o}F): 500
Exhaust Flowrate (scfm): 32,000
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 00-A-859

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 17

Associated Equipment

Associated Emission Unit ID Number: EU 17
Emissions Control Equipment ID Numbers: CE 01 and CE 45
Emissions Control Equipment Description: Electrostatic Precipitator, Sulfur Burner
Continuous Emissions Monitors ID Numbers ME1-1, ME1-2, ME1-3, ME1-4, and ME1-5

Emission Unit vented through this Emission Point: EU 17
Emission Unit Description: Main Plant Boiler, Dry-Bottom Pulverized Coal T-Fired, with Low NOx Burners
Raw Material/Fuel: Coal, Fuel Oil, and Natural Gas
Rated Capacity: 2077 MMBtu/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 40%
Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 93-A-390-S7

Pollutant: Particulate Matter
Emission Limits: 0.8 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"(1)
Iowa DNR Construction Permit 93-A-390-S7

Pollutant: PM_{10}
Emission Limits: 0.559 lb/MMBtu based on a 3-hour rolling average,
1,161.0 lb/hr expressed as the average of 3 runs, and
5,085.4 tons/yr expressed as a 12-month rolling total
Authority for Requirement: Iowa DNR Construction Permit 93-A-390-S7

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits: 5.032 lb/MMBtu based on a 3-hour rolling average,
9,882.0 lb/hr expressed as the average of 3 runs, and
43,283.2 tons/yr expressed as a 12-month rolling total
Authority for Requirement: Iowa DNR Construction Permit 93-A-390-S7

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits: Sulfur Dioxide Allowances
Authority for Requirement: 567 IAC 22.108(7) (Attached Phase II Acid Rain Permit)

Pollutant: Nitrogen Oxides (NO_x)
Emission Limits: 0.44 lb/MMBtu based on a 30-day rolling average,
885.0 lb/hr expressed as the average of 3 runs, and
3,876.3 tons/yr expressed as a 12-month rolling total
Authority for Requirement: Iowa DNR Construction Permit 93-A-390-S7

Pollutant: Nitrogen Oxides (NO_x)
Emission Limits: See attached Phase II Permit
Authority for Requirement: 567 IAC 22.125(4) (Attached Phase II Acid Rain Permit)
40 CFR Part 76

Pollutant: Carbon Monoxide (CO)
Emission Limits: 0.102 lb/MMBtu based on a 30-day rolling average,
200.3 lb/hr expressed as the average of 3 runs, and
877.3 tons/yr expressed as a 12-month rolling total
Authority for Requirement: Iowa DNR Construction Permit 93-A-390-S7

Operational Limits & Requirements

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

Work Practice Standards:

A. The control equipment associated with the Main Plant Boiler shall be inspected and maintained according to manufacturer's specifications and maintenance schedule.

Reporting & Record Keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of control equipment associated with the Main Plant Boiler.
B. The owner or operator shall maintain a record of 30-day rolling average in lbs/MMBtu of NO_x and CO emissions.
C. The owner or operator shall maintain a record of 3-hour rolling average in lbs/MMBtu of SO_2 emissions.
D. The owner or operator shall maintain a record of 12-month rolling totals in tons of NO_x, SO_2, and CO emissions.

E. The owner or operator shall submit quarterly reports on opacity, SO2, NOx, CO2, and airflow to the Administrator and IDNR. For those items only required to be submitted to the Administrator regarding the Acid Rain requirements, do not send a duplicate copy of these items to IDNR. These reports shall conform to the requirements of 40 CFR Part 75.

Authority for Requirement: Iowa DNR Construction Permit 93-A-390-S7

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 306
Stack Opening (inches, dia.): 141
Exhaust Temperature (^{o}F): 400
Exhaust Flowrate (scfm): 460,100
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 93-A-390-S7

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

Monitoring Requirements

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

Stack Testing:

Pollutant - CO
Stack Test to be Completed by: July 30, 2006
Test Method - 40 CFR 60, Appendix A, Method 10
Authority for Requirement - 567 IAC 22.108(3)

Continuous emission monitoring is required for Opacity, Sulfur Dioxide, Nitrogen Oxides, Carbon Dioxide, and airflow. The monitoring shall be maintained in accordance with the most recent version of the Title V Operating Permit and 40 CFR Part 75.
Authority for Requirement: Iowa DNR Construction Permit 93-A-390-S7

Continuous Emissions Monitoring:

Pollutant - Opacity
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 10/20/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75
Authority for Requirement - 567 IAC 25.1(1) and 567 IAC 25.2
Iowa DNR Construction Permit 93-A-390-S7

Pollutant - Sulfur Dioxide (SO_2)
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 10/20/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75
Authority for Requirement - 567 IAC 25.2
Iowa DNR Construction Permit 93-A-390-S7

Pollutant - Nitrogen Oxides (NO_x)
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance 10/20/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75
Authority for Requirement - 567 IAC 25.2
Iowa DNR Construction Permit 93-A-390-S7

Other Parameters
Pollutant - Other - Carbon Dioxide (CO_2)
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 10/20/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75
Authority for Requirement - 567 IAC 25.2
Iowa DNR Construction Permit 93-A-390-S7

Pollutant - Other - Flow
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 10/20/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75
Authority for Requirement - 567 IAC 25.2
Iowa DNR Construction Permit 93-A-390-S7

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐
Relevant requirements of CAM plan for this equipment: PM_{10}

CAM Plan for Main Plant Boiler (EU 17) is listed in Appendix A (p. 93) to this permit.

Authority for Requirement: 567 IAC 22.108(3)
40 CFR 64

Emission Point ID Number: EP 18

Associated Equipment

Associated Emission Unit ID Number: EU 18
Emissions Control Equipment Description: Water Delivery

Emission Unit vented through this Emission Point: EU 18
Emission Unit Description: Ash Hydroveyor
Raw Material/Fuel: Fly Ash
Rated Capacity: 10.3 tons/hr

Applicable Requirements

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

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

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 18-1

Associated Equipment

Associated Emission Unit ID Number: EU 18-1
Emissions Control Equipment Description: Water Delivery

Emission Unit vented through this Emission Point: EU 18-1
Emission Unit Description: Ash Hydroveyor
Raw Material/Fuel: Fly Ash
Rated Capacity: 10.3 tons/hr

Applicable Requirements

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

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

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 19

Associated Equipment

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

Emission Unit vented through this Emission Point: EU 19
Emission Unit Description: Dry Fly Ash Primary Vacuum Producer
Raw Material/Fuel: Fly Ash
Rated Capacity: 10.0 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 20%
Authority for Requirement: Iowa DNR Construction Permit 95-A-597-S2
567 IAC 22.3(3)

Pollutant: PM_{10}
Emission Limits: 0.27 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 95-A-597-S2

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-597-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.

Work Practice Standards:
Operation of the Fly Ash Backup Vacuum Producer and related baghouse shall conform to the following:

A. The Fly Ash Backup Vacuum Producer (EP 19-1) is permitted to operate only when the Fly Ash Handling Primary Vacuum Producer (EP 19) is not operating.

B. The owner or operator of the Fly Ash Backup Vacuum Producer baghouse is required to install replacement bags which have a collection efficiency that is comparable to or higher than the efficiency of the bags installed during initial emissions compliance testing of the Fly Ash Primary Vacuum Producer (EP 19).

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

A. Date on which bags are replaced in Fly Ash Primary Vacuum Producer baghouse.
B. Bag manufacturer's specifications for bags installed in Fly Ash Primary Vacuum Producer baghouse.
C. Log of maintenance and repairs performed on the Fly Ash Primary Vacuum Producer baghouse.

Authority for Requirement**:** Iowa DNR Construction Permit 95-A-597-S2

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 23
Stack Opening (inches, dia.): 10.0
Exhaust Temperature (^{o}F): 150
Exhaust Flowrate (acfm): 2,312
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 95-A-597-S2

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

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM/PM_{10}

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

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

Authority for Requirement: 567 IAC 22.108(3)"

Baghouse Agency Operation & Maintenance Plan

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. 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 exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with 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, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, specified by the manufacturer, corrective action will be taken within eight hours to return the pressure drop to normal.
- Check the broken bag indicator. If the indicator shows a broken bag, corrective action will be taken within eight hours to repair or replace the bag.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly
- Check the cleaning sequence of the baghouse
- Pulse jet baghouse - check the air delivery system
- Check hopper functions and performance

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly
- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.)

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannual
- Inspect every six months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting
Maintenance and inspection records will be kept for five years and available upon request.

Quality Control
The filter equipment will be operated and maintained according to the manufacturer recommendations.

Authority for Requirement: Iowa DNR Construction Permit 95-A-597-S2
567 IAC 22.108(3)"b"

Emission Point ID Number: 19-1

Associated Equipment

Associated Emission Unit ID Number: EU 19-1
Emissions Control Equipment ID Number: CE 19
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU 19-1
Emission Unit Description: Dry Fly Ash Backup Vacuum Producer
Raw Material/Fuel: Fly Ash
Rated Capacity: 10.0 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 20%
Authority for Requirement: Iowa DNR Construction Permit 97-A-127-S1
567 IAC 22.3(3)

Pollutant: PM_{10}
Emission Limits: 0.27 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 97-A-127-S1

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 97-A-127-S1
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.

Work practice standards:
Operation of the Fly Ash Backup Vacuum Producer and related baghouse shall conform to the following:

A. The Fly Ash Backup Vacuum Producer (EP 19-1) is permitted to operate only when the Fly Ash Handling Primary Vacuum Producer (EP 19) is not operating.

B. The owner or operator of the Fly Ash Backup Vacuum Producer baghouse is required to install replacement bags which have a collection efficiency that is comparable to or higher than the efficiency of the bags installed during initial emissions compliance testing of the Fly Ash Primary Vacuum Producer (EP 19).

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

A. Date on which bags are replaced in Fly Ash Primary Vacuum Producer baghouse.
B. Bag manufacturer's specifications for bags installed in Fly Ash Primary Vacuum Producer baghouse.
C. Log of maintenance and repairs performed on the Fly Ash Primary Vacuum Producer baghouse.

Authority for Requirement**:** Iowa DNR Construction Permit 97-A-127-S1

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 23
Stack Opening (inches, dia.): 10.0
Exhaust Temperature (^{o}F): 150
Exhaust Flowrate (acfm): 2,312
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 97-A-127-S1

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

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM/PM_{10}

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

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

Authority for Requirement: 567 IAC 22.108(3)

Baghouse Agency Operation & Maintenance Plan

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. 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 exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with 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, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, specified by the manufacturer, corrective action will be taken within eight hours to return the pressure drop to normal.
- Check the broken bag indicator. If the indicator shows a broken bag, corrective action will be taken within eight hours to repair or replace the bag.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly

- Check the cleaning sequence of the baghouse
- Pulse jet baghouse - check the air delivery system
- Check hopper functions and performance

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.)

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannual

- Inspect every six months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturer recommendations.

Authority for Requirement: Iowa DNR Construction Permit 97-A-127-S1
567 IAC 22.108(3)"b"

Emission Point ID Number: EP 20

Associated Equipment

Associated Emission Unit ID Number: EU 20
Emissions Control Equipment ID Number: CE 20
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU 20
Emission Unit Description: Fly Ash Storage Silo
Raw Material/Fuel: Fly Ash
Rated Capacity: 10.0 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 20%
Authority for Requirement: Iowa DNR Construction Permit 97-A-126
567 IAC 22.3(3)

Pollutant: PM_{10}
Emission Limits: 0.85 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 97-A-126

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 97-A-126
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.

Control equipment parameters:
Operation of the Fly Ash Storage Silo and related baghouse shall conform to the following:

The owner or operator of the Fly Ash Storage Silo baghouse is required to install replacement bags which have a collection efficiency that is comparable to or higher than the efficiency of the bags installed during initial emissions compliance testing.

Reporting and Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.
A. Date on which bags are replaced in Fly Ash Storage Silo baghouse.
B. Bag manufacturer's specifications for bags installed in Fly Ash Storage Silo baghouse.
C. Log of maintenance and repairs performed on the Fly Ash Storage Silo baghouse.

Authority for Requirement**:** Iowa DNR Construction Permit 97-A-126

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 127
Stack Opening (inches, dia.): 10.0
Exhaust Temperature (^{o}F): 70
Exhaust Flowrate (acfm): 1,400
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 97-A-126

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

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM/PM_{10}

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

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

Authority for Requirement: 567 IAC 22.108(3)

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. 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 exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with 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, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General
Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly
- The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, specified by the manufacturer, corrective action will be taken within eight hours to return the pressure drop to normal.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly
- Check the cleaning sequence of the baghouse
- Pulse jet baghouse - check the air delivery system
- Check hopper functions and performance

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly
- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.)

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannually
- Inspect every six months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting
Maintenance and inspection records will be kept for five years and available upon request.

Quality Control
The filter equipment will be operated and maintained according to the manufacturer recommendations.

Authority for Requirement: Iowa DNR Construction Permit 97-A-126
567 IAC 22.108(3)"b"

Emission Point ID Number: EP 20A

Associated Equipment

Associated Emission Unit ID Number: EU 20A
Emissions Control Equipment ID Number: CE 20a
Emissions Control Equipment Description: Telescoping Chute

Emission Unit vented through this Emission Point: EU 20a
Emission Unit Description: Fly Ash Unloading
Raw Material/Fuel: Fly Ash
Rated Capacity: 100.0 tons/hr

Applicable Requirements

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

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

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 20B

Associated Equipment

Associated Emission Unit ID Number: EU 20B
Emissions Control Equipment ID Number: CE 20b
Emissions Control Equipment Description: Water Spray

Emission Unit vented through this Emission Point: EU 20B
Emission Unit Description: Fly Ash Loadout – C-Stone Production
Raw Material/Fuel: Fly Ash
Rated Capacity: 75 tons/hr

Applicable Requirements

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

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

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 22

Associated Equipment

Associated Emission Unit ID Number: EU 22

Emission Unit vented through this Emission Point: EU 22
Emission Unit Description: Fuel Oil Tank (10,000 gallons)
Raw Material/Fuel: Fuel Oil
Rated Capacity: 417 gal/hr

Applicable Requirements

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

No applicable 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 23

Associated Equipment

Associated Emission Unit ID Number: EU 23

Emission Unit vented through this Emission Point: EU 23
Emission Unit Description: Fuel Oil Tank (10,000 gallons)
Raw Material/Fuel: Fuel Oil
Rated Capacity: 413 gal/hr

Applicable Requirements

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

No applicable 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 25

Associated Equipment

Associated Emission Unit ID Number: EU 25
Emissions Control Equipment ID Number: CE 25
Emissions Control Equipment Description: Fabric Filter Baghouse

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Emission Unit vented through this Emission Point: EU 25
Emission Unit Description: Coal Galley
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: Less Than 20%
Authority for Requirement: Iowa DNR Construction Permit 93-A-386-S2
567 IAC 23.1(2)"v"
40 CFR 60.252(c) (Subpart Y)

Pollutant: PM_{10}
Emission Limits: 0.02 gr/dscf, 1.63 lb/hr, and 7.14 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 93-A-386-S2

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

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

Process Throughput:
A. The maximum operating capacity for this equipment shall not exceed 375 tons/hr. This shall be based on a 24-hour average.

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 that 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)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 152
Stack Opening (inches, dia.): 22
Exhaust Temperature (^{o}F): Ambient
Exhaust Flowrate (scfm): 9,500
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 93-A-386-S2

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

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. Record and calculate the coal flow rate (tons/hr) average over a 24-hour period.

Authority for Requirement: Iowa DNR Construction Permit 93-A-386-S2

Monitoring Requirements

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

Stack Testing:

Pollutant - Particulate Matter
Stack Test to be Completed by: July 30, 2006
Test Method: Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - PM_{10}
Stack Test to be Completed by: July 30, 2006
Test Method - 40 CFR 51, Appendix M, 201A with 202 or Approved Alternative
Authority for Requirement - 567 IAC 22.108(3)

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

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

Relevant requirements of O & M plan for this equipment: PM/PM_{10}

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Baghouse Agency Operation & Maintenance Plan

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. 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 exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with 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, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly

- The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.
- Check and document the baghouse pressure drop. If the pressure drop falls out of the normal operating range, specified by the manufacturer, corrective action will be taken within eight hours to return the pressure drop to normal.

Maintain a written record of the observation and any action resulting from the inspection.

Monthly

- Check the cleaning sequence of the baghouse
- Pulse jet baghouse - check the air delivery system
- Check hopper functions and performance

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.)

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannually

- Inspect every six months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturer recommendations.

Emission Point ID Number: EP 25A (Fugitive)

Associated Equipment

Associated Emission Unit ID Number: EU 25

Emission Unit vented through this Emission Point: EU 25
Emission Unit Description: Coal Galley
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Applicable Requirements

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

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

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

Pollutant: Opacity
Emission Limits: Less Than 20%
Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60.252(c) (Subpart Y)

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 that 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)

Monitoring Requirements

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

Opacity Monitoring

The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.

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 26

Associated Equipment

Associated Emission Unit ID Number: EU 26

Emission Unit vented through this Emission Point: EU 26
Emission Unit Description: Coal Storage Pile
Raw Material/Fuel: Coal
Rated Capacity/Size: 4.63 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, it appurtenances or a construction haul road to be used, constructed, altered , repaired or demolished, without taking reasonable precautions to create a nuisance. All person shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.
Authority for requirement: 567 IAC 23.3(2)"c".

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 27

Associated Equipment

Associated Emission Unit ID Number: EU 27
Emissions Control Equipment ID Number: CE 27
Emissions Control Equipment Description: Fabric Filter Baghouse

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Emission Unit vented through this Emission Point: EU 27
Emission Unit Description: Coal Dumper House (Track Hoppers)
Raw Material/Fuel: Coal
Rated Capacity: 1000 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: Less Than 20%
Authority for Requirement: Iowa DNR Construction Permit 93-A-389-S1
567 IAC 23.1(2)"v"
40 CFR 60.252(c) (Subpart Y)

Pollutant: PM_{10}
Emission Limits: 0.02 gr/dscf, 1.97 lb/hr, and 8.62 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 93-A-389-S1

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

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

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 that 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)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 13
Stack Opening (inches, dia.): 23
Exhaust Temperature (^{o}F): Ambient
Exhaust Flowrate (scfm): 11,500
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 93-A-389-S1

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

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
Relevant requirements of O & M plan for this equipment: PM/PM_{10}

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Baghouse Agency Operation & Maintenance Plan

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. 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 exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with 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, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General
Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly
The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.

Monthly
- Check the cleaning sequence of the baghouse
- Pulse jet baghouse - check the air delivery system
- Check hopper functions and performance

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.)

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannually

- Inspect every six months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturer recommendations.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 28 (Fugitive)

Associated Equipment

Associated Emission Unit ID Number: EU 28

Emission Unit vented through this Emission Point: EU 28
Emission Unit Description: Coal Reclaim Tripper
Raw Material/Fuel: Coal
Rated Capacity/Size: 500 ton/hr

Applicable Requirements

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

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 29

Associated Equipment

Associated Emission Unit ID Number: EU 29

Emission Unit vented through this Emission Point: EU 29
Emission Unit Description: Barge Hopper
Raw Material/Fuel: Coal
Rated Capacity/Size: 1,000 ton/hr

Applicable Requirements

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

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 30 (Fugitive)

Associated Equipment

Associated Emission Unit ID Numbers: EU 30 and EU 38

Emission Unit vented through this Emission Point: EU 30
Emission Unit Description: Crusher
Raw Material/Fuel: Coal
Rated Capacity: 1000 tons/hr

Emission Unit vented through this Emission Point: EU 38
Emission Unit Description: Crusher House Conveyor
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Applicable Requirements

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

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

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

Pollutant: Opacity
Emission Limits: Less Than 20%
Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60.252(c) (Subpart Y)

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 that 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)

Monitoring Requirements

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

Opacity Monitoring

The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.

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 31 (Fugitive)

Associated Equipment

Associated Emission Unit ID Numbers: EU 31 and EU 37

Emission Unit vented through this Emission Point: EU 31
Emission Unit Description: Transfer Equipment
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Emission Unit vented through this Emission Point: EU 37
Emission Unit Description: Transfer House Conveyor
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limits: Less Than 20%
Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60.252(c) (Subpart Y)

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 that 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)

Monitoring Requirements

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

Opacity Monitoring

The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.

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 40

Associated Equipment

Associated Emission Unit ID Number: EU 40
Emissions Control Equipment ID Number: CE 31
Emissions Control Equipment Description: Fabric Filter Baghouse

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Emission Unit vented through this Emission Point: EU 40
Emission Unit Description: Reclaim Hopper
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: Less Than 20%
Authority for Requirement: Iowa DNR Construction Permit 93-A-388-S3
567 IAC 23.1(2)"v"
40 CFR 60.252(c) (Subpart Y)

Pollutant: PM_{10}
Emission Limits: 3.14 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 93-A-388-S3

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a" (Iowa DNR Construction Permit 93-A-388-S3)

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

Process Throughput:
B. The maximum operating capacity for this equipment shall not exceed 375 tons/hr. This shall be based on a 24-hour average.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.
B. Record and calculate the coal flow rate (tons/hr) average over a 24-hour period.

Authority for Requirement: Iowa DNR Construction Permit 93-A-388-S2

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 that 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)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 33
Stack Opening (inches, dia.): 32
Exhaust Temperature (^{o}F): Ambient
Exhaust Flowrate (scfm): 18,300
Discharge Style: Vertical
Authority for Requirement: Iowa DNR Construction Permit 93-A-388-S3

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

Monitoring Requirements

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

Stack Testing:

Pollutant - Particulate Matter (PM)
Stack Test to be Completed by: July 30, 2006
Test Method: Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - PM_{10}
Stack Test to be Completed by: July 30, 2006
Test Method - 40 CFR 51, Appendix M, 201A with 202 or Approved Alternative
Authority for Requirement - 567 IAC 22.108(3)

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

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

Relevant requirements of O & M plan for this equipment: PM/PM_{10}

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Baghouse Agency Operation & Maintenance Plan

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. 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 exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with 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, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General
Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly
The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.

Monthly
- Check the cleaning sequence of the baghouse
- Pulse jet baghouse - check the air delivery system
- Check hopper functions and performance

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.)

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannually

- Inspect every six months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturer recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 40A (Fugitive)

Associated Equipment

Associated Emission Unit ID Number: EU 40

Emission Unit vented through this Emission Point: EU 40
Emission Unit Description: Reclaim Hopper
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Applicable Requirements

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

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

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

Pollutant: Opacity
Emission Limits: Less Than 20%
Authority for Requirement: 567 IAC 23.1(2)"v"
40 CFR 60.252(c) (Subpart Y)

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 that 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)

Monitoring Requirements

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

Opacity Monitoring

The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.

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 100

Associated Equipment

Associated Emission Unit ID Numbers: EU 30, EU 38, EU 31, and EU 37
Emissions Control Equipment ID Number: CE 30
Emissions Control Equipment Description: Fabric Filter Baghouse

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Emission Unit vented through this Emission Point: EU 30
Emission Unit Description: Crusher
Raw Material/Fuel: Coal
Rated Capacity: 1000 tons/hr

Emission Unit vented through this Emission Point: EU 38
Emission Unit Description: Crusher House Conveyor
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Emission Unit vented through this Emission Point: EU 31
Emission Unit Description: Transfer Equipment
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Emission Unit vented through this Emission Point: EU 37
Emission Unit Description: Transfer House Conveyor
Raw Material/Fuel: Coal
Rated Capacity: 500 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: Less Than 20%
Authority for Requirement: Iowa DNR Construction Permit 93-A-387-S3
567 IAC 23.1(2)"v"
40 CFR 60.252(c) (Subpart Y)

Pollutant: PM_{10}
Emission Limits: 3.05 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 93-A-387-S3

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a" (Iowa DNR Construction Permit 93-A-387-S3)

Operational Limits & Requirements

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

Process Throughput:

A. The maximum operating capacity for each of the equipment EU 30, 38, 31 and 37 shall not exceed 375 tons/hr. This shall be based on a 24-hour average.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. Record and calculate the coal flow rate (tons/hr) average for each of the equipment EU 30, 38, 31 and 37 over a 24-hour period.

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 that 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)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 33
Stack Opening (inches, dia.): 32
Exhaust Temperature (^oF): Ambient
Exhaust Flowrate (scfm): 17,750
Discharge Style: Vertical
Authority for Requirement: Iowa DNR Construction Permit 93-A-387-S3

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

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

Stack Testing:

Pollutant - Particulate Matter (PM)
Stack Test to be Completed by: July 30, 2006
Test Method: Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - PM_{10}
Stack Test to be Completed by: July 30, 2006
Test Method - 40 CFR 51, Appendix M, 201A with 202 or Approved Alternative
Authority for Requirement - 567 IAC 22.108(3)

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
Relevant requirements of O & M plan for this equipment: PM/PM_{10}

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Baghouse Agency Operation & Maintenance Plan

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. 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 exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with 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, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General
Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly
- The facility shall check for visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the observation. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. 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 (> 20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a visible emission observation or an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible observations or Method 9 opacity observations 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.

Monthly
- Check the cleaning sequence of the baghouse
- Pulse jet baghouse - check the air delivery system
- Check hopper functions and performance

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Thoroughly inspect bags for leaks and wear. (Look for obvious holes or tears in the bags.)

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Bag replacement should be documented by identifying the date, time and location of the bag in relationship to the other bags. The location should be identified on an overhead drawing of the bag layout in the baghouse. Maintain a written record of the inspection and any action resulting from the inspection.

Semiannually

- Inspect every six months all components that are not subject to wear or plugging, including structural components, housing, ducts and hoods.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight hours. Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturer recommendations.

Authority for Requirement: 567 IAC 22.108(3)"b"

IV. General Conditions

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

G1. Duty to Comply

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

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

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

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the

compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

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

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
    a. Form 1.0 "Facility Identification";
    b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
    c. Form 5.0 "Title V annual emissions summary/fee"; and
    d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
    a. Form 1.0 "Facility Identification";
    b. Form 5.0 "Title V annual emissions summary/fee";
    c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:
1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information
The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties
The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring
1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
   a. The date, place and time of sampling or measurements
   b. The date the analyses were performed.
   c. The company or entity that performed the analyses.
   d. The analytical techniques or methods used.
   e. The results of such analyses; and
   f. The operating conditions as existing at the time of sampling or measurement.
   g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

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

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

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

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

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

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

a. Any monitoring or testing methods provided in these rules; or

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

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

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

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

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

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

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

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
ii. The estimated quantity of the excess emission.
iii. The time and duration of the excess emission.
iv. The cause of the excess emission.
v. The steps that were taken to remedy and to prevent the recurrence of the

incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

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

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

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

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

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

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

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

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under

section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
d. The changes are not subject to any requirement under Title IV of the Act.
e. The changes comply with all applicable requirements.
f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,
ii. The date on which the change will occur,
iii. Any change in emission as a result of that change,
iv. The pollutants emitted subject to the emissions trade
v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
vii. Any permit term or condition no longer applicable as a result of the change.
567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

i. Correct typographical errors
ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the

source;

iii. Require more frequent monitoring or reporting by the permittee; or

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

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

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

2. Minor Permit Modification.

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

i. Do not violate any applicable requirements

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

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

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

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

vi. Are not required to be processed as significant modification.

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

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

ii. The permittee's suggested draft permit

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

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

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee

need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

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

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

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

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements

pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

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

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

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

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

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

G27. Property Rights

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

G28. Transferability

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

G29. Disclaimer

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

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

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.
567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.
567 IAC 26.1(1)

G32. Contacts List

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

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

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

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

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

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

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

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

Field Office 5
401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

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

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

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

V. Appendix A: CAM Plan for Main Plant Boiler (EU 17)

Compliance Assurance Monitoring Plan
Electrostatic Precipitator for PM10 Control

Facility:	IPL/ Burlington Generating Station
EIQ Number:	92-2773
Emission Unit Description:	Dry Bottom Pulverized, T-Fired Boiler
Emission Unit Identification:	EU 17
Emission Point Identification:	EP 17
Control Equipment Identification:	CE 01
Control Technology:	Electrostatic Precipitator
Emission Limits (PM10):	0.559 lb/MMBtu
	1161.0 lb/hr
	5085.4 tons/yr
Authority for PM10 Requirement:	IDNR Construction Permit 93-A-390-S6
Current Monitoring Requirements:	Continuous Opacity Monitoring and TR Set Monitoring

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This Compliance Assurance Monitoring (CAM) plan was prepared pursuant to 40 CFR Part 64. It represents the monitoring requirements for the electrostatic precipitator (ESP) for boiler EU 17 to provide a reasonable assurance of compliance with the unit's PM10 emission limits. These monitoring requirements were established through several performance stack tests conducted in June 2001 and May 2004, and consist of Load and Opacity. These results have indicated that, during normal operations, PM10 emission were approximately 1/5th of the permit limit of 0.559 lb/mmbtu.

General

IPL/Burlington Generating Station shall conduct opacity and load vs. emission monitoring in continuous operation at all times that boiler EU 17 is operating except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities as stated in the Title V permit. Emission unit 17 startup and shutdown time periods are exempted from this CAM requirement.

As approved by the IDNR, startup is defined as the time beginning when a fire is established and ending when the unit reaches the minimum safe stable load as identified in RT 536 of the quarterly electronic data report (EDR) and required in 40 CFR 75 Appendix A, Section 6.5.2.1. Shutdown is defined as the period beginning when a unit goes below the minimum safe stable load and ending when the boiler "time-on-line" signal shows the unit is off.

Load vs. Emission CAM Indicator

The boiler will be operated based on the charts of Load vs. Emission under different conditions of TR setting or ESP section in service. The charts are included as Appendices 1 (p. 97) and 2 (p. 99).

The TR setting and/or ESP section conditions will be monitored continuously through the control room computer. When certain TR sets are off or certain ESP sections are out of service, the boiler load will be adjusted by the operators according to the charts.

Whenever TR sections are out of service, Burlington Generating Station will document to demonstrate compliance with the PM10 limits using the charts of load vs. emission.

Excursions are triggered when the chart-predicted PM10 emissions are higher than the PM10 limits. Burlington Generating Station shall document all excursions accordingly.

All excursions will be documented using the CAM event documentation sheet, included in Appendix 3 (p. 101).

Opacity CAM Indicator

Burlington Generating Station will use opacity as another CAM indicator and will continuously monitor and record opacity. The opacity shall be monitored and recorded using the Continuous Opacity Monitoring (COM) system. COM shall follow 40 CFR Part 60 requirements.

The current 6-minute opacity data will be used to calculate a one-hour average which will be compared to a pre-determined excursion point. To be consistent with 40 CFR 60 requirements, opacity CAM indicator excursions shall not apply during EU17 startup and shut down and malfunction time periods.

The opacity CAM indicator range is less than or equal to 40% and the excursion point is greater than 40% opacity. Excursions are triggered when the opacity CAM indicator exceeds 40%. Burlington Generating Station will document all excursion events using the CAM event documentation sheet, included as Appendix 3 (p. 101).

Comment [WL1]: Used to be 52%

Comment [WL2]: Used to be 52%

Comment [WL3]: Used to be 52%

In the event the opacity monitor malfunctions for a period greater than 8 hours, Burlington Generating Station will contact the IDNR. During these periods of monitor malfunction, the load versus emissions chart will be used to ensure compliance.

Quality Improvement Plan (QIP)

A Quality Improvement Plan (QIP) will be required if an accumulation of excursions of either the load CAM indicators or opacity CAM indicator exceeds 5 percent of boiler EU 17's normal operating time for a 6-month reporting period. All the requirements in 40 CFR 64.8(b) shall be fulfilled if a QIP plan is required.

Quality Assurance and Quality Control

In addition to the load and opacity indicators, Burlington Generating Station will conduct the following activities to assure compliance.

Weekly Inspections

- Inspection of ash hopper and overall ash system operation.

Corrective action measures will be implemented on the occurrence of an abnormal condition. Indications of abnormal operating parameters will trigger a maintenance work order request. The maintenance work request system establishes a work priority to ensure that work on the ESP, or its control system, is performed as soon as possible, considering the unit's need to provide electricity to meet customer demand.

Annual Inspection of the Electrostatic Precipitator

- Inspect plate and electrode alignment and adjust if necessary.
- Check plates and electrodes for excess fouling and signs of corrosion.
- Check the TR set mechanical condition.
- Inspect the insulator housings for mechanical condition.
- Inspect internal structural components for signs of corrosion, air leakage, and mechanical failure.

Corrective actions will be implemented in a timely manner based on the findings of the inspection.

Record Keeping and Reporting

- Opacity reports and supporting data will be kept in accordance with 567 IAC 25.
- Records of all planned unit outage inspections and any actions resulting from these inspections will be kept for five years.
- Whenever an excursion is triggered, Burlington Generating Station will document the duration and cause (including unknown cause) of the excursion and the corrective actions taken.
- All excursions will be reported in semi-annual monitoring reports and annual compliance certifications.

Authority for Requirement: 567 IAC 22.108(3)
40 CFR 64

Appendix 1 to the CAM Plan for Main Plant Boiler

Load vs. PM10 Emissions (lb/MMbtu) Chart

Burlington Generating Station -- Based on May 13, 2004 Test Program
Load vs. PM-10 Emissions (lb/million Btu) Chart from MP-ESP (includes condensibles)

ESP Configuration

Outlet of ESP

9		10	
5	6	7	8
1	2	3	4

Inlet of ESP

Emission Limit is 0.559 lb/million Btu. Values in RED indicate over limit.

ESP Section Outage

1	2	3	4	5	6	7	8	9	10	Sections Out of Service
0	0	0	0	0	0	0	0	0	0	0
1				0				0	0	1
0				1				0	0	1
0				0				1	0	1
0				0				0	1	1
2				0				0	0	2
0				2				0	0	2
0				0				1	1	2
1	0			1	0			0	0	2
0	1	0		0	1	0		0	0	2
0	1	0		0	1	0		0	0	2
0		1		0		1		0	0	2
0	1			1	0			0	0	2
1	0			0	1			0	0	2
0				1	0			1	0	2
0				0	1			0	1	2
0				1	0			0	1	2
0				0	1			1	0	2
1	0			0				1	0	2
0	1			0				0	1	2
1	0			0				0	1	2
0	1			0				1	0	2
3				0				0	0	3
0				3				0	0	3
1				0				1	1	3
0				1				1	1	3
1	0			0	2			0	0	3
1	1	0		0		1		0	0	3
0	1	1		1		0		0	0	3
0	1	1		0		1		0	0	3
1	1	0		1		0		0	0	3
4				0				0	0	4
0				4				0	0	4
1	1	0		0				1	1	4
0	1	1		0				1	1	4
0				1	1	0		1	1	4
0				0	1	1		1	1	4
1	1	1	0	1			0	0	0	4
1	1	1	0	0			1	0	0	4
1	0			0	1	1	1	0	0	4
0		1		1	1	1	0	0	0	4
1	1	0		0	1	0		1	0	4
0	1	1		1	0			0	1	4
4				0				1	0	5
0				4				1	0	5
4				0				1	1	6
0				4				1	1	6

Heat Input (million Btu/hr, HHV basis), from historical CEMS database

2527	2473	2419	2366	2312	2258	2205	2151	2097	2043	1990	1936	1882	1775	1667	1560	1452	1345	1238	1130	1023	915	808	700	593

Generating Load (MW, gross)

230	225	220	215	210	205	200	195	190	185	180	175	170	160	150	140	130	120	110	100	90	80	70	60	50
0.152	0.149	0.146	0.142	0.139	0.136	0.133	0.129	0.126	0.123	0.120	0.116	0.113	0.107	0.100	0.094	0.087	0.081	0.074	0.068	0.062	0.055	0.049	0.042	0.036
0.185	0.181	0.177	0.173	0.169	0.165	0.161	0.157	0.153	0.149	0.145	0.141	0.137	0.130	0.122	0.114	0.106	0.098	0.090	0.083	0.075	0.067	0.059	0.051	0.043
0.185	0.181	0.177	0.173	0.169	0.165	0.161	0.157	0.153	0.149	0.145	0.141	0.137	0.130	0.122	0.114	0.106	0.098	0.090	0.083	0.075	0.067	0.059	0.051	0.043
0.185	0.181	0.177	0.173	0.169	0.165	0.161	0.157	0.153	0.149	0.145	0.141	0.137	0.130	0.122	0.114	0.106	0.098	0.090	0.083	0.075	0.067	0.059	0.051	0.043
0.185	0.181	0.177	0.173	0.169	0.165	0.161	0.157	0.153	0.149	0.145	0.141	0.137	0.130	0.122	0.114	0.106	0.098	0.090	0.083	0.075	0.067	0.059	0.051	0.043
0.270	0.264	0.258	0.253	0.247	0.241	0.235	0.230	0.224	0.218	0.212	0.207	0.201	0.189	0.178	0.166	0.155	0.144	0.132	0.121	0.109	0.098	0.086	0.075	0.063
0.270	0.264	0.258	0.253	0.247	0.241	0.235	0.230	0.224	0.218	0.212	0.207	0.201	0.189	0.178	0.166	0.155	0.144	0.132	0.121	0.109	0.098	0.086	0.075	0.063
0.268	0.262	0.257	0.251	0.245	0.239	0.234	0.228	0.222	0.217	0.211	0.205	0.200	0.188	0.177	0.165	0.154	0.143	0.131	0.120	0.108	0.097	0.086	0.074	0.063
0.562	0.550	0.538	0.526	0.514	0.502	0.490	0.478	0.466	0.454	0.442	0.430	0.418	0.394	0.371	0.347	0.323	0.299	0.275	0.251	0.227	0.203	0.180	0.156	0.132
0.562	0.550	0.538	0.526	0.514	0.502	0.490	0.478	0.466	0.454	0.442	0.430	0.418	0.394	0.371	0.347	0.323	0.299	0.275	0.251	0.227	0.203	0.180	0.156	0.132
0.562	0.550	0.538	0.526	0.514	0.502	0.490	0.478	0.466	0.454	0.442	0.430	0.418	0.394	0.371	0.347	0.323	0.299	0.275	0.251	0.227	0.203	0.180	0.156	0.132
0.562	0.550	0.538	0.526	0.514	0.502	0.490	0.478	0.466	0.454	0.442	0.430	0.418	0.394	0.371	0.347	0.323	0.299	0.275	0.251	0.227	0.203	0.180	0.156	0.132
0.270	0.264	0.258	0.253	0.247	0.241	0.235	0.230	0.224	0.218	0.212	0.207	0.201	0.189	0.178	0.166	0.155	0.144	0.132	0.121	0.109	0.098	0.086	0.075	0.063
0.270	0.264	0.258	0.253	0.247	0.241	0.235	0.230	0.224	0.218	0.212	0.207	0.201	0.189	0.178	0.166	0.155	0.144	0.132	0.121	0.109	0.098	0.086	0.075	0.063
0.413	0.405	0.396	0.387	0.378	0.369	0.361	0.352	0.343	0.334	0.325	0.317	0.308	0.290	0.273	0.255	0.238	0.220	0.202	0.185	0.167	0.150	0.132	0.115	0.097
0.413	0.405	0.396	0.387	0.378	0.369	0.361	0.352	0.343	0.334	0.325	0.317	0.308	0.290	0.273	0.255	0.238	0.220	0.202	0.185	0.167	0.150	0.132	0.115	0.097
0.269	0.263	0.257	0.252	0.246	0.240	0.235	0.229	0.223	0.217	0.212	0.206	0.200	0.189	0.177	0.166	0.155	0.143	0.132	0.120	0.109	0.097	0.086	0.075	0.063
0.269	0.263	0.257	0.252	0.246	0.240	0.235	0.229	0.223	0.217	0.212	0.206	0.200	0.189	0.177	0.166	0.155	0.143	0.132	0.120	0.109	0.097	0.086	0.075	0.063
0.413	0.405	0.396	0.387	0.378	0.369	0.361	0.352	0.343	0.334	0.325	0.317	0.308	0.290	0.273	0.255	0.238	0.220	0.202	0.185	0.167	0.150	0.132	0.115	0.097
0.413	0.405	0.396	0.387	0.378	0.369	0.361	0.352	0.343	0.334	0.325	0.317	0.308	0.290	0.273	0.255	0.238	0.220	0.202	0.185	0.167	0.150	0.132	0.115	0.097
0.269	0.263	0.257	0.252	0.246	0.240	0.235	0.229	0.223	0.217	0.212	0.206	0.200	0.189	0.177	0.166	0.155	0.143	0.132	0.120	0.109	0.097	0.086	0.075	0.063
0.269	0.263	0.257	0.252	0.246	0.240	0.235	0.229	0.223	0.217	0.212	0.206	0.200	0.189	0.177	0.166	0.155	0.143	0.132	0.120	0.109	0.097	0.086	0.075	0.063
0.355	0.347	0.340	0.332	0.325	0.317	0.310	0.302	0.295	0.287	0.279	0.272	0.264	0.249	0.234	0.219	0.204	0.189	0.174	0.159	0.144	0.129	0.113	0.098	0.083
0.355	0.347	0.340	0.332	0.325	0.317	0.310	0.302	0.295	0.287	0.279	0.272	0.264	0.249	0.234	0.219	0.204	0.189	0.174	0.159	0.144	0.129	0.113	0.098	0.083
0.498	0.487	0.476	0.466	0.455	0.445	0.434	0.424	0.413	0.402	0.392	0.381	0.371	0.350	0.328	0.307	0.286	0.265	0.244	0.223	0.201	0.180	0.159	0.138	0.117
0.498	0.487	0.476	0.466	0.455	0.445	0.434	0.424	0.413	0.402	0.392	0.381	0.371	0.350	0.328	0.307	0.286	0.265	0.244	0.223	0.201	0.180	0.159	0.138	0.117
0.355	0.347	0.340	0.332	0.325	0.317	0.310	0.302	0.295	0.287	0.279	0.272	0.264	0.249	0.234	0.219	0.204	0.189	0.174	0.159	0.144	0.129	0.113	0.098	0.083
0.355	0.347	0.340	0.332	0.325	0.317	0.310	0.302	0.295	0.287	0.279	0.272	0.264	0.249	0.234	0.219	0.204	0.189	0.174	0.159	0.144	0.129	0.113	0.098	0.083
0.355	0.347	0.340	0.332	0.325	0.317	0.310	0.302	0.295	0.287	0.279	0.272	0.264	0.249	0.234	0.219	0.204	0.189	0.174	0.159	0.144	0.129	0.113	0.098	0.083
0.647	**0.633**	**0.619**	**0.606**	**0.592**	**0.578**	**0.564**	0.551	0.537	0.523	0.509	0.496	0.482	0.454	0.427	0.399	0.372	0.344	0.317	0.289	0.262	0.234	0.207	0.179	0.152
0.647	**0.633**	**0.619**	**0.606**	**0.592**	**0.578**	**0.564**	0.551	0.537	0.523	0.509	0.496	0.482	0.454	0.427	0.399	0.372	0.344	0.317	0.289	0.262	0.234	0.207	0.179	0.152
0.440	0.431	0.421	0.412	0.403	0.393	0.384	0.375	0.365	0.356	0.346	0.337	0.328	0.309	0.290	0.272	0.253	0.234	0.216	0.197	0.178	0.159	0.141	0.122	0.103
0.440	0.431	0.421	0.412	0.403	0.393	0.384	0.375	0.365	0.356	0.346	0.337	0.328	0.309	0.290	0.272	0.253	0.234	0.216	0.197	0.178	0.159	0.141	0.122	0.103
0.727	**0.712**	**0.696**	**0.681**	**0.665**	**0.650**	**0.635**	**0.619**	**0.604**	**0.588**	**0.573**	0.557	0.542	0.511	0.480	0.449	0.418	0.387	0.356	0.325	0.294	0.263	0.233	0.202	0.171
0.727	**0.712**	**0.696**	**0.681**	**0.665**	**0.650**	**0.635**	**0.619**	**0.604**	**0.588**	**0.573**	0.557	0.542	0.511	0.480	0.449	0.418	0.387	0.356	0.325	0.294	0.263	0.233	0.202	0.171
0.727	**0.712**	**0.696**	**0.681**	**0.665**	**0.650**	**0.635**	**0.619**	**0.604**	**0.588**	**0.573**	0.557	0.542	0.511	0.480	0.449	0.418	0.387	0.356	0.325	0.294	0.263	0.233	0.202	0.171
0.727	**0.712**	**0.696**	**0.681**	**0.665**	**0.650**	**0.635**	**0.619**	**0.604**	**0.588**	**0.573**	0.557	0.542	0.511	0.480	0.449	0.418	0.387	0.356	0.325	0.294	0.263	0.233	0.202	0.171
0.732	**0.716**	**0.701**	**0.685**	**0.670**	**0.654**	**0.639**	**0.623**	**0.608**	**0.592**	**0.576**	**0.561**	0.545	0.514	0.483	0.452	0.421	0.390	0.359	0.327	0.296	0.265	0.234	0.203	0.172
0.440	0.431	0.421	0.412	0.403	0.393	0.384	0.375	0.365	0.356	0.346	0.337	0.328	0.309	0.290	0.272	0.253	0.234	0.216	0.197	0.178	0.159	0.141	0.122	0.103
0.440	0.431	0.421	0.412	0.403	0.393	0.384	0.375	0.365	0.356	0.346	0.337	0.328	0.309	0.290	0.272	0.253	0.234	0.216	0.197	0.178	0.159	0.141	0.122	0.103
0.440	0.431	0.421	0.412	0.403	0.393	0.384	0.375	0.365	0.356	0.346	0.337	0.328	0.309	0.290	0.272	0.253	0.234	0.216	0.197	0.178	0.159	0.141	0.122	0.103
0.728	**0.713**	**0.697**	**0.682**	**0.666**	**0.651**	**0.635**	**0.620**	**0.604**	**0.589**	**0.573**	0.558	0.542	0.511	0.480	0.450	0.419	0.388	0.357	0.326	0.295	0.264	0.233	0.202	0.171
0.728	**0.713**	**0.697**	**0.682**	**0.666**	**0.651**	**0.635**	**0.620**	**0.604**	**0.589**	**0.573**	0.558	0.542	0.511	0.480	0.450	0.419	0.388	0.357	0.326	0.295	0.264	0.233	0.202	0.171
0.813	**0.796**	**0.779**	**0.761**	**0.744**	**0.727**	**0.70958**	**0.692**	**0.675**	**0.658**	**0.640**	**0.623**	**0.606**	**0.571**	0.537	0.502	0.468	0.433	0.398	0.364	0.329	0.295	0.260	0.225	0.191
0.813	**0.796**	**0.779**	**0.761**	**0.744**	**0.727**	**0.70958**	**0.692**	**0.675**	**0.658**	**0.640**	**0.623**	**0.606**	**0.571**	0.537	0.502	0.468	0.433	0.398	0.364	0.329	0.295	0.260	0.225	0.191
1.187	**1.161**	**1.136**	**1.111**	**1.086**	**1.060**	**1.03524**	**1.010**	**0.985**	**0.960**	**0.934**	**0.909**	**0.884**	**0.833**	**0.783**	**0.733**	**0.682**	**0.632**	**0.581**	0.531	0.480	0.430	0.379	0.329	0.278
1.187	**1.161**	**1.136**	**1.111**	**1.086**	**1.060**	**1.03524**	**1.010**	**0.985**	**0.960**	**0.934**	**0.909**	**0.884**	**0.833**	**0.783**	**0.733**	**0.682**	**0.632**	**0.581**	0.531	0.480	0.430	0.379	0.329	0.278

Appendix 2 to the CAM Plan for Main Plant Boiler

Load vs. PM10 Emissions (lb/hour) Chart

Burlington Generating Station -- Based on May 13, 2004 Test Program
Load vs. PM-10 Emissions (lb/hour) Chart from MP-ESP (includes condensibles)

ESP Configuration

Outlet of ESP

9		10	
5	6	7	8
1	2	3	4

Inlet of ESP

Emission Limit is 1161 lb/hour. Values in RED indicate over limit.

ESP Section Outage

1	2	3	4	5	6	7	8	9	10	Sections Out of Service
0	0	0	0	0	0	0	0	0	0	0
1				0				0	0	1
0				1				0	0	1
0				0				1	0	1
0				0				0	1	1
2				0				0	0	2
0				2				0	0	2
0				0				1	1	2
1	0			1	0			0	0	2
0	1	0		0	1	0		0	0	2
0		1	0	0		1	0	0	0	2
0			1	0			1	0	0	2
0	1			1	0			0	0	2
1	0			0	1			0	0	2
0				1		0		1	0	2
0				0		1		0	1	2
0				1		0		0	1	2
0				0		1		1	0	2
1		0		0				1	0	2
0		1		0				0	1	2
1		0		0				0	1	2
0		1		0				1	0	2
3				0				0	0	3
0				3				0	0	3
1				0				1	1	3
0				1				1	1	3
1	0			0	2			0	0	3
1	1	0		0		1		0	0	3
0		1	1	1		0		0	0	3
0		1	1	0		1		0	0	3
1	1	0		1		0		0	0	3
4				0				0	0	4
0				4				0	0	4
1	1	0		0				1	1	4
0		1	1	0				1	1	4
0				1	1	0		1	1	4
0				0		1	1	1	1	4
1	1	1	0	1			0	0	0	4
1	1	1	0	0			1	0	0	4
1	0			0	1	1	1	0	0	4
0			1	1	1	1	0	0	0	4
1	1	0		0		1	0	1	0	4
0		1	1	1		0		0	1	4
4				0				1	0	5
0				4				1	0	5
4				0				1	1	6
0				4				1	1	6

Heat Input (million Btu/hr, HHV basis), from historical CEMS database

Generating Load (MW, gross)

2527	2473	2419	2366	2312	2258	2205	2151	2097	2043	1990	1936	1882	1775	1667	1560	1452	1345	1238	1130	1023	915	808	700	593
230	225	220	215	210	205	200	195	190	185	180	175	170	160	150	140	130	120	110	100	90	80	70	60	50
384.1	368.0	352.2	336.7	321.6	306.8	292.4	278.3	264.6	251.2	238.2	225.5	213.1	189.5	167.3	146.4	126.9	108.8	92.1	76.8	62.9	50.4	39.3	29.5	21.2
466.3	446.7	427.5	408.7	390.4	372.4	354.9	337.8	321.2	304.9	289.1	273.7	258.7	230.0	203.0	177.7	154.1	132.1	111.9	93.3	76.4	61.2	47.7	35.8	25.7
466.3	446.7	427.5	408.7	390.4	372.4	354.9	337.8	321.2	304.9	289.1	273.7	258.7	230.0	203.0	177.7	154.1	132.1	111.9	93.3	76.4	61.2	47.7	35.8	25.7
466.3	446.7	427.5	408.7	390.4	372.4	354.9	337.8	321.2	304.9	289.1	273.7	258.7	230.0	203.0	177.7	154.1	132.1	111.9	93.3	76.4	61.2	47.7	35.8	25.7
466.3	446.7	427.5	408.7	390.4	372.4	354.9	337.8	321.2	304.9	289.1	273.7	258.7	230.0	203.0	177.7	154.1	132.1	111.9	93.3	76.4	61.2	47.7	35.8	25.7
681.5	652.8	624.8	597.3	570.5	544.3	518.7	493.8	469.4	445.7	422.5	400.0	378.1	336.2	296.7	259.7	225.2	193.1	163.5	136.3	111.6	89.4	69.7	52.4	37.5
681.5	652.8	624.8	597.3	570.5	544.3	518.7	493.8	469.4	445.7	422.5	400.0	378.1	336.2	296.7	259.7	225.2	193.1	163.5	136.3	111.6	89.4	69.7	52.4	37.5
677.1	648.6	620.8	593.5	566.9	540.8	515.4	490.6	466.4	442.8	419.8	397.5	375.7	334.0	294.8	258.0	223.7	191.8	162.4	135.4	110.9	88.8	69.2	52.0	37.3
1419.3	**1359.5**	**1301.1**	**1244.0**	**1188.1**	1133.6	1080.3	1028.3	977.5	928.1	879.9	833.1	787.5	700.1	617.9	540.9	468.9	402.1	340.4	283.9	232.5	186.2	145.1	109.0	78.1
1419.3	**1359.5**	**1301.1**	**1244.0**	**1188.1**	1133.6	1080.3	1028.3	977.5	928.1	879.9	833.1	787.5	700.1	617.9	540.9	468.9	402.1	340.4	283.9	232.5	186.2	145.1	109.0	78.1
1419.3	**1359.5**	**1301.1**	**1244.0**	**1188.1**	1133.6	1080.3	1028.3	977.5	928.1	879.9	833.1	787.5	700.1	617.9	540.9	468.9	402.1	340.4	283.9	232.5	186.2	145.1	109.0	78.1
1419.3	**1359.5**	**1301.1**	**1244.0**	**1188.1**	1133.6	1080.3	1028.3	977.5	928.1	879.9	833.1	787.5	700.1	617.9	540.9	468.9	402.1	340.4	283.9	232.5	186.2	145.1	109.0	78.1
681.5	652.8	624.8	597.3	570.5	544.3	518.7	493.8	469.4	445.7	422.5	400.0	378.1	336.2	296.7	259.7	225.2	193.1	163.5	136.3	111.6	89.4	69.7	52.4	37.5
681.5	652.8	624.8	597.3	570.5	544.3	518.7	493.8	469.4	445.7	422.5	400.0	378.1	336.2	296.7	259.7	225.2	193.1	163.5	136.3	111.6	89.4	69.7	52.4	37.5
1044.4	1000.5	957.5	915.4	874.3	834.2	795.0	756.7	719.4	683.0	647.5	613.1	579.5	515.2	454.7	398.0	345.1	295.9	250.5	208.9	171.1	137.0	106.7	80.2	57.5
1044.4	1000.5	957.5	915.4	874.3	834.2	795.0	756.7	719.4	683.0	647.5	613.1	579.5	515.2	454.7	398.0	345.1	295.9	250.5	208.9	171.1	137.0	106.7	80.2	57.5
679.3	650.7	622.8	595.4	568.7	542.6	517.1	492.2	467.9	444.2	421.2	398.7	376.9	335.1	295.8	258.9	224.4	192.5	162.9	135.9	111.3	89.1	69.4	52.2	37.4
679.3	650.7	622.8	595.4	568.7	542.6	517.1	492.2	467.9	444.2	421.2	398.7	376.9	335.1	295.8	258.9	224.4	192.5	162.9	135.9	111.3	89.1	69.4	52.2	37.4
1044.4	1000.5	957.5	915.4	874.3	834.2	795.0	756.7	719.4	683.0	647.5	613.1	579.5	515.2	454.7	398.0	345.1	295.9	250.5	208.9	171.1	137.0	106.7	80.2	57.5
1044.4	1000.5	957.5	915.4	874.3	834.2	795.0	756.7	719.4	683.0	647.5	613.1	579.5	515.2	454.7	398.0	345.1	295.9	250.5	208.9	171.1	137.0	106.7	80.2	57.5
679.3	650.7	622.8	595.4	568.7	542.6	517.1	492.2	467.9	444.2	421.2	398.7	376.9	335.1	295.8	258.9	224.4	192.5	162.9	135.9	111.3	89.1	69.4	52.2	37.4
679.3	650.7	622.8	595.4	568.7	542.6	517.1	492.2	467.9	444.2	421.2	398.7	376.9	335.1	295.8	258.9	224.4	192.5	162.9	135.9	111.3	89.1	69.4	52.2	37.4
896.7	859.0	822.1	786.0	750.7	716.2	682.5	649.7	617.6	586.4	556.0	526.3	497.5	442.4	390.4	341.7	296.3	254.1	215.1	179.4	146.9	117.6	91.6	68.9	49.4
896.7	859.0	822.1	786.0	750.7	716.2	682.5	649.7	617.6	586.4	556.0	526.3	497.5	442.4	390.4	341.7	296.3	254.1	215.1	179.4	146.9	117.6	91.6	68.9	49.4
1257.4	**1204.5**	1152.8	1102.2	1052.7	1004.3	957.1	911.0	866.1	822.3	779.6	738.1	697.7	620.3	547.5	479.2	415.5	356.3	301.6	251.5	206.0	165.0	128.5	96.6	69.2
1257.4	**1204.5**	1152.8	1102.2	1052.7	1004.3	957.1	911.0	866.1	822.3	779.6	738.1	697.7	620.3	547.5	479.2	415.5	356.3	301.6	251.5	206.0	165.0	128.5	96.6	69.2
896.7	859.0	822.1	786.0	750.7	716.2	682.5	649.7	617.6	586.4	556.0	526.3	497.5	442.4	390.4	341.7	296.3	254.1	215.1	179.4	146.9	117.6	91.6	68.9	49.4
896.7	859.0	822.1	786.0	750.7	716.2	682.5	649.7	617.6	586.4	556.0	526.3	497.5	442.4	390.4	341.7	296.3	254.1	215.1	179.4	146.9	117.6	91.6	68.9	49.4
896.7	859.0	822.1	786.0	750.7	716.2	682.5	649.7	617.6	586.4	556.0	526.3	497.5	442.4	390.4	341.7	296.3	254.1	215.1	179.4	146.9	117.6	91.6	68.9	49.4
1634.5	**1565.7**	**1498.4**	**1432.6**	**1368.3**	**1305.4**	**1244.1**	**1184.2**	1125.8	1068.8	1013.4	959.4	906.9	806.3	711.6	622.9	540.0	463.1	392.1	326.9	267.7	214.4	167.0	125.6	90.0
1634.5	**1565.7**	**1498.4**	**1432.6**	**1368.3**	**1305.4**	**1244.1**	**1184.2**	1125.8	1068.8	1013.4	959.4	906.9	806.3	711.6	622.9	540.0	463.1	392.1	326.9	267.7	214.4	167.0	125.6	90.0
1111.9	1065.1	1019.4	974.6	930.8	888.1	846.3	805.6	765.9	727.1	689.4	652.7	616.9	548.5	484.1	423.7	367.4	315.0	266.7	222.4	182.1	145.9	113.6	85.4	61.2
1111.9	1065.1	1019.4	974.6	930.8	888.1	846.3	805.6	765.9	727.1	689.4	652.7	616.9	548.5	484.1	423.7	367.4	315.0	266.7	222.4	182.1	145.9	113.6	85.4	61.2
1837.7	**1760.4**	**1684.8**	**1610.8**	**1538.5**	**1467.8**	**1398.8**	**1331.5**	**1265.8**	**1201.8**	1139.4	1078.7	1019.7	906.6	800.1	700.3	607.2	520.7	440.8	367.6	301.0	241.1	187.8	141.2	101.2
1837.7	**1760.4**	**1684.8**	**1610.8**	**1538.5**	**1467.8**	**1398.8**	**1331.5**	**1265.8**	**1201.8**	1139.4	1078.7	1019.7	906.6	800.1	700.3	607.2	520.7	440.8	367.6	301.0	241.1	187.8	141.2	101.2
1837.7	**1760.4**	**1684.8**	**1610.8**	**1538.5**	**1467.8**	**1398.8**	**1331.5**	**1265.8**	**1201.8**	1139.4	1078.7	1019.7	906.6	800.1	700.3	607.2	520.7	440.8	367.6	301.0	241.1	187.8	141.2	101.2
1837.7	**1760.4**	**1684.8**	**1610.8**	**1538.5**	**1467.8**	**1398.8**	**1331.5**	**1265.8**	**1201.8**	1139.4	1078.7	1019.7	906.6	800.1	700.3	607.2	520.7	440.8	367.6	301.0	241.1	187.8	141.2	101.2
1849.7	**1771.8**	**1695.7**	**1621.2**	**1548.5**	**1477.3**	**1407.9**	**1340.1**	**1274.0**	**1209.6**	1146.8	1085.7	1026.3	912.5	805.3	704.9	611.1	524.1	443.7	370.0	303.0	242.7	189.0	142.1	101.8
1111.9	1065.1	1019.4	974.6	930.8	888.1	846.3	805.6	765.9	727.1	689.4	652.7	616.9	548.5	484.1	423.7	367.4	315.0	266.7	222.4	182.1	145.9	113.6	85.4	61.2
1111.9	1065.1	1019.4	974.6	930.8	888.1	846.3	805.6	765.9	727.1	689.4	652.7	616.9	548.5	484.1	423.7	367.4	315.0	266.7	222.4	182.1	145.9	113.6	85.4	61.2
1111.9	1065.1	1019.4	974.6	930.8	888.1	846.3	805.6	765.9	727.1	689.4	652.7	616.9	548.5	484.1	423.7	367.4	315.0	266.7	222.4	182.1	145.9	113.6	85.4	61.2
1839.9	**1762.5**	**1686.8**	**1612.7**	**1540.3**	**1469.6**	**1400.5**	**1333.1**	**1267.3**	**1203.2**	1140.8	1080.0	1020.9	907.7	801.1	701.2	607.9	521.3	441.4	368.0	301.4	241.4	188.0	141.4	101.3
1839.9	**1762.5**	**1686.8**	**1612.7**	**1540.3**	**1469.6**	**1400.5**	**1333.1**	**1267.3**	**1203.2**	1140.8	1080.0	1020.9	907.7	801.1	701.2	607.9	521.3	441.4	368.0	301.4	241.4	188.0	141.4	101.3
2055.1	**1968.7**	**1884.1**	**1801.4**	**1720.5**	**1641.4**	**1564.3**	**1489.0**	**1415.5**	**1343.9**	**1274.2**	**1206.3**	1140.3	1013.8	894.8	783.2	679.0	582.3	493.0	411.1	336.6	269.6	210.0	157.9	113.2
2055.1	**1968.7**	**1884.1**	**1801.4**	**1720.5**	**1641.4**	**1564.3**	**1489.0**	**1415.5**	**1343.9**	**1274.2**	**1206.3**	1140.3	1013.8	894.8	783.2	679.0	582.3	493.0	411.1	336.6	269.6	210.0	157.9	113.2
2998.4	**2872.2**	**2748.8**	**2628.1**	**2510.1**	**2394.8**	**2282.2**	**2172.4**	**2065.2**	**1960.7**	**1859.0**	**1760.0**	**1663.7**	**1479.1**	**1305.5**	1142.7	990.7	849.5	719.2	599.8	491.2	393.4	306.4	230.3	165.1
2998.4	**2872.2**	**2748.8**	**2628.1**	**2510.1**	**2394.8**	**2282.2**	**2172.4**	**2065.2**	**1960.7**	**1859.0**	**1760.0**	**1663.7**	**1479.1**	**1305.5**	1142.7	990.7	849.5	719.2	599.8	491.2	393.4	306.4	230.3	165.1

Appendix 3 to the CAM Plan for Main Plant Boiler

CAM Event Form

CAM Event Form
Burlington Generating Station

Purpose: Provide documentation of compliance assurance monitoring (CAM) event when having 2 or more ESP TR sections are in outage (see instructions when half RT sections are in outage) and/or opacity exceeding 40% (one hour average). Both events to be applied to this form will be indicated by the computer alarm system.

Comment [WL4]: Used to be 52%

Note: This form shall be used only when control room alarm is triggered. Please do not use it for boiler startup/shutdown period exceedances.

Completed by Operator			
Operator Name: _____			
1. Date:	**2**. Event Start Time: _____	Event End Time: _____	Event Total Time: _____, Minutes
3. Alarmed CAM Indicator: ☐ Load vs. Emission at _____ MW (gross), fill in **4 thru 8**. ☐ Opacity at _____ % (1-hr Ave), fill in **6 thru 8**			
4. Indicate TR Section Outage(s): ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10			
5. Enter PM10 values from the attached Load vs. Emission Charts: _____(lb/mmBtu),_____(lb/hr)			
6. Alarm/Malfunction Cause(s): ☐ Boiler Upset; ☐ Boiler Adjustment; ☐ Soot Blowing; ☐ Control Equipment (ESP, etc.); ☐ Other_____			
7. Corrective Action(s): ☐ Drop load to _____Gross MW; ☐ Reset TR ; ☐ Fuel Adjustment; ☐ Other_____			
8. ☐ Give to Plant Environmental and Safety Specialist once complete.			
Completed by E&S Specialist			
1. Date: _____	Time: _____	Name: _____	
2. PM-10 Emission Rate During Alarming Time (Load vs Emissions **only**): _____ ☐ lb/MMBtu, if ≥ 0.559, go to **3**. Otherwise, stop here and keep the record. _____ ☐ lb/hr, if ≥ 1161, go to **3**. Otherwise, stop here and keep the record.			
3. Total excursion hours this 6 month reporting period so far: L. vs. E _____ hr. Opacity _____hr.			
4. Calculate % of excursion (s) for 6-month reporting period: L. vs. E _____%; Opacity _____%			
5. Does either of them exceed 5% for this 6 month reporting period? ☐ Yes, go to **6**. ☐ No, go to **7**			
6. Initiate and submit QIP to the IDNR (Support provided by Air Specialist)			
7. Report in semi-annual report and annual certification.			

Plant Environmental and Safety Specialist Comments:
E & S Signature: _____

*See back for Instructions

The following is the instructions on how to use the lb/hr vs load and lbs/mmbtu vs load charts. When in alarm, both the lb/hr vs load chart and lbs/mmbtu vs load chart need to be checked. Operator will fill out items 1 through 8 on the CAM Event form.

1. Date – Date of the alarm

2. Event Start at (time the alarm comes in); Event End Time (time event ends): Event Total Time (total minutes of event) Minutes.

3. Alarmed CAM Indicator

   a. Put a check in the Load vs. Emission check box.

   b. Insert the Gross MW on line.

4. Insert an "X" in the correct TR Section Outage boxes. Insert a "/" if only half of TR section is in outage. After the boxes have been checked, go to ESP Section Outage of the chart and find the TR outage that matches the current TR outage. (see "a." through "d." below for half-section outages)

   a. If there is a half-section outage in Sections 1-8, count the outage as a whole section outage.

   b. If there are two half-section outages of the ESP in Sections 1-8, then count that as one whole section outage.

   c. If there are three half-section outages of the ESP in Sections 1-8, then count that as two whole section outages (i.e., round up to the next higher outage number).

   d. For outlet sections 9 and 10, if you lose half a section, count the entire section as an outage since there is no further collection behind it.

Electrostatic Precipitator TR Sections

9		10	
5	6	7	8
1	2	3	4

5. Once TR is established, go to the right to find the recorded MW column. The reportable emission rate will be where the TR and MW meet. Fill this number in the provided space.

6. Alarm/Malfunction Cause(s) – Check the appropriate box or fill in.

7. Corrective Action (s) – Check the appropriate box or fill in.

8. Give to Plant Environmental and Safety Specialist once complete.

VI. Appendix B: Acid Rain Phase II Permit

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

Phase II Acid Rain Permit

Issued to:	Burlington
Operated by:	Alliant Power
ORIS code:	1104
Effective:	July 30, 2004 through July 29, 2009.

For the Director of the Department of Natural Resources

Douglas A. Campbell 7/30/04

Douglas A. Campbell, Supervisor of Operating Permits Section — Date

Acid Rain Permit comprises the following:

1) Statement of Basis.

2) SO_2 allowances allocated under this permit and NO_x requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

4) The permit application submitted for this source, as corrected by the Iowa Department of Natural Resources (IDNR), Air Quality Bureau, Operating Permit Section. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

1) Statement of Basis

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

2) SO_2 Allowance Allocations and NO_x Requirements for each affected unit

		2004	2005	2006	2007	2008	2009
Unit 1	SO_2 allowances, under Table 2 of 40 CFR part 73.	4498*	4498*	4498*	4498*	4498*	4498*
	NO_x limit (Averaging Plan through Dec. 31, 2004)	Pursuant to 40 CFR part 76, The Iowa Department of Natural Resources approves a NO_x compliance plan which includes an emission averaging plan for Unit 1. The NO_x emission averaging plan is effective from July 30, 2004 through December 31, 2004. Under the NO_x averaging plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the alternative contemporaneous annual emission limitation of 0.32 lbs/mmBtu, and this unit's actual annual heat input shall not be less than the annual heat input of 10,541,792 mmBtu. The other units in the averaging plan are Prairie Creek Unit 3, Prairie Creek Unit 4, Milton L. Kapp Unit 2, Sutherland Unit 1, Sutherland Unit 2, Sixth Street Unit 2, Sixth Street Unit 3, Sixth Street Unit 4, Sixth Street Unit 5, Dubuque Unit 1, Dubuque Unit 5, Lansing Unit 1, Lansing Unit 2 and Lansing Unit 3. For each year under the plan, the actual Btu-weighted annual average emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitation in 40 CFR 76.5. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A) and (B)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous emission limitation and annual heat input limit. On January 1, 2005, under the remainder of the NO_x compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation under 40 CFR 76.7(a)(1), which is 0.40 lbs/mmBtu for tangentially fired units. In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x averaging plan and the requirements covering excess emissions.						

* The number of allowances allocated to Phase II affected units by U.S. EPA in 40 CFR part

73 Table 2 (Revised September 28, 1998). In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

3) Comments, Notes and Justifications:

Renewal of the Phase II SO_2 and NO_x permit.

The NO_x Averaging Plan portion of this Phase II Permit will cover the period from July 30, 2004 through December 31, 2004 (IDNR). On January 1, 2005 the NO_x emission limit changes to the Revised NO_x emission limitations for Group 1, Phase II boilers (40 CFR 76.7). An application for a new averaging plan must be submitted no later than January 1, 2005 (See 40 CFR 76.11(b)(1)) in lieu of complying with the Revised NO_x emission limitations for Group 1, Phase II boilers (40 CFR 76.7).

4) Permit Application: Attached.

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Acid Rain Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is: ☐ New ☐ Revised XRRenewal

STEP 1

Identify the source by plant name, State, and ORIS code.

Plant Name	State	ORIS Code
Burlington Generating Station	IA	1104

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a." For new units, enter the requested information in columns "c" and "d."

a	b	c	d
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
1	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

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Burlington Generating Station
Plant Name (from Step 1)

STEP 3

Read the standard requirements

Permit Requirements

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

Monitoring Requirements

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

Sulfur Dioxide Requirements

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

EPA Form 7610-16 (rev. 10-01)

STEP 3, Cont'd.

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

Excess Emissions Requirements

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

Recordkeeping and Reporting Requirements

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

Liability

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

EPA Form 7610-16 (rev. 10-01)

Burlington Generating Station
Plant Name (from Step 1)

Step 3, Cont'd

Liability, Cont'd

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the certification statement, sign, and date

Certification

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

Name Daniel L. Mineck	
Signature	Date 3-21-02

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