# Iowa Department of Natural Resources Title V Operating Permit

Name of Permitted Facility: City of Ames Steam Electric Plant

Facility Location: 200 East 5th Street, Ames, Iowa 50010

Air Quality Operating Permit Number: 97-TV-008R4

**Expiration Date: 7/24/2028** 

Permit Renewal Application Deadline: 1/24/2028

**EIO Number: 92-0224** 

Facility File Number: 85-01-006

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## Responsible Official

Name: Donald Kom

**Title: Director - Electric Services** 

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

**Name: Curtis Spence** 

Title: Assistant Director – Electric Services Mailing Address: 502 Carroll, Ames, IA 50010

Phone #: (515) 239-5176

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. Two individual Title V Permits are issued for the City of Ames Combustion Turbine Station and the City of Ames Steam Electric Plant. These two facilities are considered one stationary source. This permit is for the City of Ames Steam Electric Plant, and another permit has been issued for the City of Ames Combustion Turbine Station (Permit # 99-TV-022R4, EIQ # 92-5831, Facility # 85-01-006).

For the Director of the Department of Natural Resources

Marnie Stein, Supervisor of Air Operating Permits Section

Date

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## **Abbreviations**

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AC	
	actual cubic feet per minute
	Code of Federal Regulations
CE	
CEM	continuous equipment monitor
DC	direct current
°F	degrees Fahrenheit
	emissions inventory questionnaire
EP	
EU	
ESP	electrostatic precipitator
ft <sup>2</sup>	
gal	
gal/min	
	grains per dry standard cubic foot
	grains per one hundred cubic feet
	Iowa Administrative Code
	Iowa Department of Natural Resources
KW	
	parts per million by volume
lb./hr	
	pounds per million British thermal units
	motor vehicle air conditioner
MMft <sup>3</sup>	
MWe	
	North American Industry Classification System
	new source performance standards
	Source Classification Codes
	standard cubic feet per minute
	Standard Industrial Classification
TPY	
USEPA	United States Environmental Protection Agency
<b>Pollutants</b>	
PM	narticulate matter
	particulate matter ten microns or less in diameter
SO <sub>2</sub>	
NO <sub>x</sub>	
	volatile organic compounds
CO	
паг	hazardous air pollutants

## I. Facility Description and Equipment List

Facility Name: City of Ames Steam Electric Plant

Permit Number: 97-TV-008R4

Facility Description: Steam Electric Plant (SIC 4911)

## **Equipment List**

Emission	Emission	<b>Emission Unit Description</b>	IDNR
Point	Unit	_	Construction
Number	Number		Permit Number
EP-1	EU-1	Boiler #8	79-A-231-P3
EP-2	EU-2	Boiler #7	01-A-918-P2
EP-3		Fly Ash Silo (Ash Transport)	79-A-230-S1
EP-3A	EU-3	Fly Ash Silo (Silo Vent)	N/A
EP-3B		Fly Ash Silo (Truck Load Out)	N/A
EP-7A	EU-7	Refuse Derived Fuel Storage Bin (SW corner)	97-A-763
EP-7B	EU-/	Refuse Derived Fuel Storage Bin (NW corner)	97-A-764
EP-8A	EU-8	Refuse Derived Fuel Storage Bin (SE corner)	97-A-765
EP-8B	EU-8	Refuse Derived Fuel Storage Bin (NE corner)	97-A-766
EP-15	EU-15	Emergency Diesel Fire Pump (197 BHP)	N/A
EP-17	EU-17	Cooling Tower	15-A-210
EP-18	EU-18	Cooling Tower	15-A-211

## **Insignificant Activities Equipment List**

Insignificant Emission Unit Number	Insignificant Emission Unit Description	
EU-10	Fuel Oil Tank (Coal Yard-3,000 gal)	
EU-11	Unit 7 Turbine Oil System (2,300 gal)	
EU-12	Unit 8 Turbine Oil System (3,300 gal)	
EU-13	Centrifuge Oil System (4,000 gal)	
EU-14	Sulfuric Acid Storage Tanks (2-3,200 gal each)	

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

Facility Name: City of Ames Steam Electric Plant

Permit Number: 97-TV-008R4

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

#### **Permit Duration**

The term of this permit is: 5 years Commencing on: 7/25/2023

Ending on: 7/24/2028

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

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#### **Emission Limits**

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

Opacity (visible emissions): 40% opacity

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

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

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

#### Particulate Matter:

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

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B). Authority for Requirement: 567 IAC 23.3(2)"a"

<u>Fugitive Dust:</u> Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be

used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

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

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

#### 40 CFR 60 Subpart A Requirements

This facility is an affected source and these General Provisions apply to the facility. The affected units are EU-1 (Boiler #8) and EU-15 (Emergency Diesel Fire Pump).

See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR 60 Subpart A

567 IAC 23.1(2)

#### 40 CFR 60 Subpart D Requirements

This facility is subject to Standards of Performance for Fossil-Fuel-fired Steam Generators for Which Construction Is Commenced After August 17, 1971 – 40 CFR 60 subpart D and the affected unit is EU-1 (Boiler #8).

See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR 60 Subpart D

567 IAC 23.1(2)"a"

## 40 CFR 60 Subpart IIII Requirements

This facility is subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines – 40 CFR 60 subpart IIII and the affected unit is EU-15 (Emergency Fire Pump Diesel Engine).

See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR 60 Subpart IIII

567 IAC 23.1(2)"yyy"

#### 40 CFR 63 Subpart A Requirements

This facility is an affected source and these General Provisions apply to the facility. The affected unit is EU-15 is Emergency Fire Pump Diesel Engine.

See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR Part 63 Subpart A

567 IAC 23.1(4)

## 40 CFR 63 Subpart ZZZZ Requirements

EU-15 (Emergency Fire Pump Diesel Engine) is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63 Subpart ZZZZ).

See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

567 IAC 23.1(4)"cz"

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

Facility Name: City of Ames Steam Electric Plant

Permit Number: 97-TV-008R4

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

## **Associated Equipment**

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
	Boiler #8, Dry Bottom Wall-Fired Unit	CE-1:	Natural Gas &		
EU-1		Electrostatic	Refuse Derived	775 MMBtu/hr	79-A-231-P3
		Precipitator	Fuel		

Continuous Emissions Monitors ID Number: ME-1

## **Applicable Requirements**

## BACT 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% (1)

Authority for Requirement: DNR Construction Permit 79-A-231-P3

(1) Opacity shall not exceed 20% (6-minute average), except for one (1) 6-minute period per hour of not more than

27% opacity.

Pollutant: Particulate Matter (PM) Federal Emission Limits: 337 tons/yr; 76.9 lb/hr (3)

Authority for Requirement: DNR Construction Permit 79-A-231-P3

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limits: 4,045 tons/yr <sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 79-A-231-P3

(2) Compliance with the emission standards shall be demonstrated through the use of Continuous Emission

Monitoring Systems (CEMS).

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limits: 2,358 tons/yr

Authority for Requirement: DNR Construction Permit 79-A-231-P3

Pollutant: Carbon Monoxide (CO) Emission Limits: 0.20 lb/MMBtu (3)

Authority for Requirement: DNR Construction Permit 79-A-231-P3

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

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

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limits: 86 ng/J heat input <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 79-A-231-P3

567 IAC 23.1(2)"a" 40 CFR 60.44(a)(1)

 $^{(1)}$  86 ng/J = 0.20 lb/MMBTU. Emission limit per 40 CFR §60.44(a)(1) when the unit is burning gaseous fuel.

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

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

- For affected facilities electing to comply with 40 CFR §60.44(e), any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards in §60.44 or,
- For affected facilities electing to comply with 40 CFR \$60.44(e), any thirty (30) operating day period during which the average emissions (arithmetic average of all one (1) hour periods during the thirty (30) operating days) of NO<sub>x</sub> as measured by a CEMS exceed the applicable standard in 40 CFR \$60.44. Facilities complying with the thirty (30) day NO<sub>x</sub> standard shall use the most current associated NO<sub>x</sub> compliance and monitoring requirements in 40 CFR \$60.48Da and 40 CFR \$60.49Da.

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

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

Pollutant: Particulate Matter (PM) - State

Emission Limits: 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 79-A-231-P3

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

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

Emission Limits: 923.0 lb/hr; 500ppm<sub>v</sub>

Authority for Requirement: DNR Construction Permit 79-A-231-P3

567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limits: 538.1 lb/hr

Authority for Requirement: DNR Construction Permit 79-A-231-P3

Pollutant: Carbon Monoxide (CO)

Emission Limits: 155 lb/hr

Authority for Requirement: DNR Construction Permit 79-A-231-P3

<sup>(3)</sup>Limit applies at all times including startup, shutdown and malfunction.

#### **Acid Rain Limits**

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

Emission Limits: Sulfur Dioxide Allowances

Authority for Requirement: 567 IAC 22.108(7) (See attached Phase II Permit – Appendix B)

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

Emission Limits: See attached Phase II Acid Rain Permit

Authority for Requirement: 567 IAC 22.125(4) (See attached Phase II Permit – Appendix B)

40 CFR 76.7(a)(1)

#### Cross-State Air Pollution Rule (CSAPR) (aka Transport Rule (TR)) Limit

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

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

Sulfur Dioxide (SO<sub>2</sub>) Group 1

Emission Limits: Nitrogen Oxides and Sulfur Dioxide Allowances

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

#### **NESHAP and NSPS**

This emission unit is subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and D (*Standards of Performance for Fossil-Fuel-fired Steam Generators for Which Construction Is Commenced After August 17, 1971*; 40 CFR §60.40 – 40 CFR §60.46) of the New Source Performance Standards (NSPS).

Authority for Requirement: DNR Construction Permit 79-A-231-P3

40 CFR 60 Subpart A 567 IAC 23.1(2) 40 CFR 60 Subpart D 567 IAC 23.1(2)"a"

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

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

- A. This unit shall be limited to firing on natural gas and refuse derived fuel (RDF).
- B. This unit shall not fire more than 30% by weight of RDF, calculated each calendar quarter.
  - a. Record the amount of natural gas fired in this unit, in standard cubic feet.
     Calculate the amount of natural gas fired in this unit, in pounds, using standard conversion factors. Calculate and record monthly totals.
  - b. Record the amount of RDF fired in this unit, in pounds. Calculate and record monthly totals.
  - c. Calculate and record the weight percentage of RDF fired in this unit on a calendar quarterly basis.

- C. This boiler shall be started on natural gas only.
- D. As required by 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 21-126) the owner or operator shall document:
  - a. A description of the project (Project Number 21-126),
  - b. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 21-126), and
  - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in D.a – D.c,.
- E. As required by 567 IAC 33.3(18)"f"(4), the owner or operator shall:
  - a. Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project (Project Number 21-126) that is emitted by any emissions unit identified in Condition D.b.
  - b. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- F. As required by 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain a record containing the information required in D. listed above and that record shall be retained by the owner or operator for a period of five (5) years after the project (Project Number 21-126) is completed.
- G. As required by 567 IAC 33.3(18)"f"(6), the owner or operator shall submit a report to the Department within sixty (60) days after the end of each year during which records must be generated under Condition E above, setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- H. The owner or operator shall maintain the electrostatic precipitator for this emission unit in accordance with the approved Compliance Assurance Monitoring (CAM) Plan in the Title V operating permit. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the electrostatic precipitator. This log shall include, but is not necessarily limited to:
  - a. The date and time any inspection and/or maintenance was performed on the electrostatic precipitator;
  - b. Any issues identified during the inspection and the date each issue was resolved;
  - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
- d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 79-A-231-P3

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from ground): 210 Stack Opening (inches, diameter): 132 Exhaust Flow Rate (scfm): 242,000 Exhaust Temperature (°F): 240

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 79-A-231-P3

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

#### **Monitoring Requirements**

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

## **Stack Testing:**

Pollutant – Carbon Monoxide (CO) Stack Test to be completed – Once every 5 years <sup>(1)</sup>. Last completed 12/20/2022 Test Method – 40 CFR 60, Appendix A, Method 10

Authority for Requirement - DNR Construction Permit 79-A-231-P3

(1) Test shall be conducted while combusting a combination of natural gas and RDF.

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

The following continuous emission monitoring requirements apply to this emission point and its associated emission unit(s) and control equipment:

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

• *Opacity:* 

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

If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Administrator).

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

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

#### • SQ2:

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

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit. For this CEMS, the quality assurance provisions under Part 75 can be met in lieu of the quality assurance provisions in Part 60 Appendix F. In this instance, there will be a quarterly notice to the Department with the dates of the quarterly linearity tests and the annual relative accuracy test audit (RATA). The facility will conduct quarterly linearity tests as required under 40 CFR Part 75 in lieu of the cylinder gas audits required under 40 CFR Part 60.

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

#### • *NO*<sub>x</sub>:

In accordance with 40 CFR §60.45(a), the owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system (CEMS) and record the output of the system, for measuring nitrogen oxides (NO<sub>x</sub>) emissions.

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit. For this CEMS, the quality assurance provisions under Part 75 can be met in lieu of the quality assurance provisions in Part 60 Appendix F. In this instance, there will be a quarterly notice to the Department with the dates of the quarterly linearity tests and the annual relative accuracy test audit (RATA). The facility will conduct quarterly linearity tests as required under 40 CFR Part 75 in lieu of the cylinder gas audits required under 40 CFR Part 60.

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

#### • O2 or CO2:

In accordance with 40 CFR 60.45(a), the owner or operator shall install, calibrate, maintain, and operate a CEMS and record the output of the system, for measuring the oxygen  $O_2$  or carbon dioxide  $O_2$  content of the flue gases at each location where  $O_2$  or  $O_3$  emissions are monitored.

#### • Flowmeter:

The owner or operator shall install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of 40 CFR 60, Appendix B, Performance Specification 6 and 40 CFR 60, Appendix F, Procedure 1. In addition, the owner or operator shall record the output of the system, for measuring the volumetric flow of exhaust gases discharged to the atmosphere. Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20(c) and 40 CFR 75, Appendix A and continuing to meet the applicable quality control and quality assurance requirements of 40 CFR §75.21 and 40 CFR 75, Appendix B may be used.

- B. The following data requirements shall apply to all CEMS for non-NSPS emission standards in this permit:
  - (1) The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission unit except for CEM breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
  - (2) The 1-hour average SO<sub>2</sub> and NO<sub>x</sub> emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least 2 data points must be used to calculate each 1-hour average.
  - (3) For each hour of missing emission data ( $NO_x$  or  $SO_2$ ), the owner or operator shall substitute data by:
    - (i) If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
      - (a) For the missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
      - (b) For a missing data period greater than 24 hours, substitute the greater of:
        - The 90<sup>th</sup> percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
        - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
    - (ii) If the monitor data availability is at least 90.0% but less than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
      - (a) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

- (b) For the missing data period of more than 8 hours, substitute the greater of:
  - The 95<sup>th</sup> percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
  - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- (iii)If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.
- C. If requested by the Department, the owner/operator shall coordinate the quarterly linearity tests with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.
- D. Per 567 IAC 25.2 **Continuous emission monitoring under the acid rain program.** This unit is subject to the continuous emission monitoring requirements for affected units under the acid rain program as provided in 40 CFR Part 75, including Appendices A, B, and F as amended through January 24, 2008 (Appendix F also was corrected on February 13, 2008).

Authority for Requirement: DNR Construction Permit 79-A-231-P3

## **Opacity Observation During Continuous Opacity Monitor Downtime**

If the continuous opacity monitor fails to operate, other than during periods for planned maintenance or calibration periods, the opacity shall be observed at least once per day. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

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 tests shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

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

## Compliance Assurance Monitoring (CAM) Plan For PM Control Boiler 8 (EU1)

## I. Background

#### A. Emision Unit:

Identification: EU-1, EP-1

Description: **Boiler #8**, Dry Bottom Wall-Fired Natural Gas Boiler

Fuel: Natural Gas (Auxiliary Fuel: Refuse Derived Fuel)

Rated Capacity: 775 MMBtu/hr

Facility: City of Ames Steam Electric Plant

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

Applicable Regulations: DNR Construction Permit 79-A-231-P3

US EPA PSD Permit-issued November 5, 1979

567 IAC 23.1(2)"a" 567 IAC 23.3(2)"b"(2) 40 CFR Part 60 Subpart D

PM Emission Limit: 0.6 lb/MMBtu and 76.9 lb/hr

## C. Current Monitoring Requirements:

Continuous Opacity Monitoring Systems ME-1 ESP1 Audible Precipitator Malfunction Alarm (control room)

#### D. Control Technology:

Electrostatic Precipitator CE-1

## II. Monitoring Approach

I. Indicator	Opacity of ESP exhaust		
Measurement Approach	ESP exhaust opacity is directly correlated with particulate emission rate.		
II. Indicator Range	A CAM excursion occurs when the opacity exceeds 15% (hourly average) during normal operations. Periods of startup, shutdown, or cleaning of control equipment are excluded per 567 IAC 24.1(1).		
III. Performance Criteria	EPA Procedure 3 is followed to ensure maximum COMS uptime.		
A. Data Representativeness	The COMs is installed at a representative location in the ESP exhaust per 40 CFR 60, Appendix B, Performance Specification 1		
B. Verification of Operational Status	Maximum COMS uptime will be maintained in accordance with the applicable provisions in 40 CFR 75 and 567 IAC 25.		
C. QA/QC Practices/Criteria	Maintain and operate the control equipment in a manner consistent with good practice for minimizing emissions.		
D. Monitoring Frequency	The opacity of the ESP exhaust is monitored continuously (every 10 seconds).		
i. Data Collection Procedures	The data acquisition system (DAS) retains all 6-minute average and hourly average opacity data. Electronic records of opacity reports will be maintained for 5 years		
ii.Averaging Period	36 evenly spaced data points are used to calculate 6-min averages. The 6-min averages are then used to calculate the hourly opacity average.		

#### III. MONITORING APPROACH JUSTIFICATION

#### A. Background

Unit 8 has two (2) dry electrostatic precipitators (ESPs) each consisting of eight (8) fields which were constructed simultaneously with Unit 8 Boiler. These UOP Air Correction Division Precipitators are considered to be 'hot-side' precipitators which are stacked vertically between the boiler outlet and the regenerative air pre-heater inlet. Modernized microprocessor-based precipitator controls manufactured by the Stock Equipment Company have been retrofitted into the original Transformer-Rectifier (T-R) and Rapper systems. Unit 8 is subject to the provisions of the New Source Performance Standards as well as the Acid Rain Program. Unit 8, originally designed to burn pulverized coal co-fired with Refuse-Derived Fuel (RDF), has been retrofitted to burn natural gas and co-fire RDF. This fuel change has resulted in significantly lower particulate levels entering the ESPs, far below their design capacity. Unit 8 is equipped with a Continuous Opacity Monitoring System (COMS) designed to meet all requirements of 40 CFR 60 Appendix B, Performance Specification 1.

## B. Rationale for Selection of Performance Indicators

Unit 8's expected particulate loading is greatly diminished to the conversion of the unit from coal to natural gas. The previous CAM plan (which was actually a mix between a CAM plan and O&M plan) used the number of precipitator fields in operation as an indicator as to whether particulate was properly being controlled. This is no longer a good indicator of particulate control efficiency as the Unit 8 precipitator is designed for much more particulate. Opacity measurements are now being used as the performance indicator for Unit 8 as many fields could be inoperable, or all fields could be inoperable if only burning natural gas, without significantly affecting particulate emissions. The precipitator will be run as designed by the manufacturer and following manufacturer recommendations, but issues with the precipitator which are not accompanied by a CAM excursion will no longer require a unit shutdown.

#### C. Rationale for Selection of Indicator Ranges

As part of the previous Title V permit application, results of the three most recent particulate material (PM) emission tests were analyzed and correlated with the observed opacity during each test. The actual PM emission rate was compared to the applicable PM standard to determine what percentage of the standard was observed during the test. This percentage was then extrapolated with the observed opacity to determine an expected opacity value if 100% of the applicable PM standard were to be emitted. The average expected opacity at 100% of the applicable PM standard was determined to be 20%. 15% opacity has been chosen to trigger action before the permit limit is reached.

Authority for Requirement: 567 IAC 22.108(3)

40 CFR Part 64

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

## **Associated Equipment**

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
EU-2	Boiler #7, Dry Bottom Tangentially-Fired Unit	CE-2: Electrostatic Precipitator	Natural Gas & Refuse Derived Fuel (RDF)	476 MMBtu/hr	01-A-918-P2

Continuous Emissions Monitors ID Number: ME-2

## **Applicable Requirements**

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

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

Pollutant: Carbon Monoxide (CO) Emission Limits: 0.20 lb/MMBtu (1)

Authority for Requirement: DNR Construction Permit 01-A-918-P2

## Other 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: DNR Construction Permit 01-A-918-P2

567C 23.3(2)"d"

Pollutant: Particulate Matter (PM) Emission Limits: 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 01-A-918-P2

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

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

Emission Limits: 520 lb/hr; 500 ppm<sub>v</sub>, 5 lb/MMBtu (2)

Authority for Requirement: DNR Construction Permit 01-A-918-P2

567 IAC 23.3(3)"e" 567 IAC 23.3(3)"a"(2)

(2)Limit applies to the heat input of RDF only.

<sup>(1)</sup> Limit applies at all times including startup, shutdown and malfunction.

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

Pollutant: Carbon Dioxide (CO) Emission Limits: 95.2 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-918-P2

#### **Acid Rain Limits**

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

Emission Limits: Sulfur Dioxide Allowances

Authority for Requirement: 567 IAC 22.108(7) (See attached Phase II Permit – Appendix B))

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

Emission Limits: See attached Phase II Acid Rain Permit

Authority for Requirement: 567 IAC 22.125(4) (See attached Phase II Permit – Appendix B)

40 CFR 76.7(a)(1)

#### Cross-State Air Pollution Rule (CSAPR) (aka Transport Rule (TR)) Limit

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

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

Sulfur Dioxide (SO<sub>2</sub>) Group 1

Emission Limits: Nitrogen Oxides and Sulfur Dioxide Allowances

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

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

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

- A. This unit shall be limited to firing on natural gas and refuse derived fuel (RDF).
- B. This unit shall not fire more than 30% by weight of RDF, calculated each calendar quarter.
  - a. Record the amount of natural gas fired in this unit, in standard cubic feet. Calculate the amount of natural gas fired in this unit, in pounds, using standard conversion factors. Calculate and record monthly totals.
  - b. Record the amount of RDF fired in this unit, in pounds. Calculate and record monthly totals.
  - c. Calculate and record the weight percentage of RDF fired in this unit on a calendar quarterly basis.
- C. This boiler shall be started on natural gas only.
- D. As required by 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 19-206) the owner or operator shall document:
  - a. A description of the project (Project Number 19-206),
  - b. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 19-206), and
  - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual

emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "projected actual emissions" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in 5.D.a – 5.D.c.

- E. As required by 567 IAC 33.3(18)"f"(4), the owner or operator shall:
  - a. Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project (Project Number 19-206) that is emitted by any emissions unit identified in Condition D.b.
  - b. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- F. As required by 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain a record containing the information required in Condition 5.D. of this permit and that record shall be retained by the owner or operator for a period of five (5) years after the project (Project Number 19-206) is completed.
- G. As required by 567 IAC 33.3(18)"f"(6), the owner or operator shall submit a report to the Department within sixty (60) days after the end of each year during which records must be generated under Condition E. setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- H. The owner or operator shall maintain the electrostatic precipitator for this emission unit in accordance with the approved Compliance Assurance Monitoring (CAM) Plan in the Title V operating permit. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the electrostatic precipitator. This log shall include, but is not necessarily limited to:
  - a. The date and time any inspection and/or maintenance was performed on the electrostatic precipitator;
  - b. Any issues identified during the inspection and the date each issue was resolved;
  - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
- d. Identification of the staff member performing the maintenance or inspection. Authority for Requirement: DNR Construction Permit 01-A-918-P2

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from ground): 200 Stack Opening (inches, diameter): 96 Exhaust Flow Rate (scfm): 142,000 Exhaust Temperature (°F): 252

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 01-A-918-P2

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

#### **Monitoring Requirements**

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

## **Stack Testing:**

Pollutant – Carbon Monoxide (CO)

1st Stack Test to be completed: Once every 5 years (1). Last Completed 01/09/2020

Test Method - 40 CFR Part 60 Appendix A, Method 10

Authority for Requirement: DNR Construction Permit 01-A-918-P2

(1) Test shall be conducted while combusting a combination of natural gas and RDF.

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

The following continuous emission monitoring requirements apply to this emission point and its associated emission unit(s) and control equipment:

Per 567 IAC 25.2 Continuous emission monitoring under the acid rain program. This unit is subject to the continuous emission monitoring requirements for affected units under the acid rain program as provided in 40 CFR Part 75, including Appendices A, B, and F as amended through January 24, 2008 (Appendix F also was corrected on February 13, 2008).

Authority for Requirement: DNR Construction Permit 01-A-918-P2

Pollutant - Sulfur Dioxide (SO<sub>2</sub>)
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 12/30/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75
Authority for Requirement - 567 IAC 25.2

Pollutant - Nitrogen Oxides (NOx)

Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 12/30/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75
Authority for Requirement - 567 IAC 25.2

#### **Other Parameters**

Pollutant - Other - Carbon Dioxide (CO<sub>2</sub>)
Operational Specifications - 40 CFR Part 75
Initial System Calibration/Quality Assurance - 12/30/94
Ongoing System Calibration/Quality Assurance - 40 CFR Part 75
Reporting & Record keeping - 40 CFR Part 75
Authority for Requirement - 567 IAC 25.2

Pollutant - Other - Flow Operational Specifications -40 CFR Part 75 Initial System Calibration/Quality Assurance - 12/30/94 Ongoing System Calibration/Quality Assurance - 40 CFR Part 75 Reporting & Record keeping - 40 CFR Part 75 Authority for Requirement - 567 IAC 25.2

The owner of this equipment or 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 tests shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

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

## Compliance Assurance Monitoring (CAM) Plan For PM Control Boiler 7 (EU2)

## I. Background

#### A. Emission Unit: 7

Identification: EU-2, EP-2

Description: Boiler #7, Dry Bottom Tangentially-Fired Natural Gas

Boiler

Fuel: Natural Gas (Auxiliary Fuel: Refuse Derived Fuel)

Rated Capacity: 476 MMBtu/hr

Facility: City of Ames-Steam Electric Plant

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

Applicable Regulations: DNR Construction Permit 01-A-918-P2

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

PM Emission Limit: 0.6 lb/MMBtu

## C. <u>Current Monitoring Requirements:</u>

ESP2 Audible Precipitator Malfunction Alarm (Control Room)

#### D. Control Technology:

Electrostatic Precipitator CE-2

#### II. Monitoring Approach

I. Indicator	
A. Measurement Approach	The precipitator diagnostic system continuously monitors for T-R set failure and rapper control malfunction and alarms via the Distributed Controls System (DCS).
	Digital meters continuously display voltage, spark rate, and amperage on each ESP control cabinet.

II. Indicator Range	The precipitator diagnostic system will continuously monitor for T-R set failure, rapper control malfunction, and ash transport system failure. Failure of two (2) T-R set(s) or 50% of the rappers will require the vigilant monitoring of stack opacity, possibly requiring the initiation of corrective action. Random T-R set failure and rapper failure will not significantly affect precipitator performance.
III. Performance Criteria	
A. Data Representativeness	Continuously (more than or equal to four times an hour) monitor the T-R sets and indicate which, if any, are out of service.
	The precipitator diagnostic system was selected as the performance indicator because it is indicative of operation of the ESP in a manner necessary to comply with the emission standard.
B. Verification of Operational Status	Daily inspection of the rapper system, the T-R sets, and the ash removal system provides verification of proper electro-mechanical operation of the electrostatic precipitator.
C. QA/QC Practices/Criteria	Maintain and operate the control equipment in a manner consistent with good practice for minimizing emissions.
D. Monitoring Frequency	The precipitator diagnostic system will continuously (more than or equal to four times and hour) monitor for T-R set failure and rapper control malfunction.
	The precipitator ash hopper level alarm will continuously monitor for high ash hopper levels. It will go into alarm when the ash in the hopper reaches the high limits. Corrective action will be one (1) or more hoppers in two (2) or more fields, goes into high ash hopper level alarm.
	Inspection of the T-R set operation will include monitoring secondary voltages and currents of the T-R sets.

## III. MONITORING APPROACH JUSTIFICATION

## A. Background

Unit 7 has a dry electrostatic precipitator (ESP) which was constructed in 2002 to replace the original electrostatic precipitator which was constructed at the same time as the Unit 7 boiler. This newer, modern, more efficient precipitator was installed to more efficiently capture the

particulate matter (PM) emissions associated with switching from Eastern and Midwestern coal to ultra-low sulfur Western coal. The Hamon Research-Cottrell cold-side precipitator is equipped with three (3) cells, each with a dedicated dual bushing transformer-rectifier (T-R) set. The collection electrodes are a barbed pipe design rather than the traditional wire design. The precipitator is equipped with microprocessor-based T-R and rapper controls which control the precipitator to maximize efficiency. In 2016, the Unit 7 boiler was converted from coal to natural gas as its primary fuel. This fuel change has resulted in significantly lower particulate levels entering the ESP, far below the original design capacity. Unit 7 is not subject to the provisions of the New Source Performance Standards (NSPS) and is not equipped with a Continuous Opacity Monitoring System (COMS).

#### B. Rationale for Selection of Performance Indicators

Unit 7's expected particulate loading is greatly diminished due to the conversion of the unit from coal to natural gas. The previous CAM plan (which was a mix between a CAM plan and O&M plan) used the number of precipitator fields in operation as well as reading from the COMS as an indicator as to whether particulate was properly being controlled. Since Unit 7 is no longer required to have an operable COMS, the COMS elements have been removed from the plan. The usable indicator is the number of precipitator fields in service.

The Unit 7 precipitator was designed for an inlet temperature of 280°F which is difficult to achieve during startups and any time the unit is operating at low load (which consists of combusting gaseous fuel only). Operating the precipitator with inlet temperatures lower than the design temperature could lead to internal damage of the collection surfaces, which would lower the overall efficiency of the precipitator. Additionally, there may be times where full operation of the precipitator cannot be achieved, but PM emission limits are not at risk due to the extremely low PM loading of the precipitator.

#### C. Rationale for Selection of Indicator Ranges

Given the extremely low amount of particulate matter entering the precipitator as compared to the precipitator's original design, 50% operation of the precipitator has been chosen as the lowest acceptable value of PM control without further investigation. This precipitator is designed such that in the event of an issue on one half-field (or one bushing of the transformer), the field can be 'split' and operated on one bushing only. The current expected particulate is 16% of the measured particulate loading prior to the natural gas conversion project, which gives a significant safety buffer even with the extra half-field possibly being inoperable.

Furthermore, there is negligible particulate matter when natural gas is the only fuel being combusted.

Authority for Requirement: 567 IAC 22.108(3)

40 CFR 64

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

## Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
EU-3	Fly Ash Storage Silo/Transfer System	CE-3A: Cyclone Separators CE-3B: Cyclone Separators CE-3C: Bag Filter CE-3D: In-line Filter	Fly Ash	30 tons/hr.	79-A-230-S1

## **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limits: 40% (1)

Authority for Requirement: DNR Construction Permit 79-A-230-S1

567 IAC 23.3(2)"d"

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

Emission Limits: 1.56 lb/hr

Authority for Requirement: DNR Construction Permit 79-A-230-S1

Pollutant: Particulate Matter (PM) Emission Limits: 5.1 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 79-A-230-S1

567 IAC 23.3(2)"a"(2)

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

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

- A. Maintain Cyclone Separators (CE-3A, and CE-3B), Bag Filter (CE-3C), and In-line Filter (CE-3D) according to manufacturer's specifications and maintenance schedule.
- B. Record on a monthly basis, all maintenance (if any) of Cyclone Separators (CE-3A, and CE-3B), Bag Filter (CE-3C), and In-line Filter (CE-3D).

Authority for Requirement: DNR Construction Permit 79-A-230-S1

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

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from ground): 28 Stack Opening (inches, diameter): 8 Exhaust Flow Rate (scfm): 1,820 Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 79-A-230-S1

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

#### **Monitoring Requirements**

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

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

## **Emission Point ID Number: EP-3A**

## **Associated Equipment**

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
EU-3	Fly Ash Silo, Silo Vent	CE-3E: Baghouse	Fly Ash	30 tons/hr.	NA

## **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limits: 40 %

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

Pollutant: Particulate Matter (PM) 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 ⋈

## **Emission Point ID Number: EP-3B**

## **Associated Equipment**

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
EU-3	Fly Ash Silo, Truck Load-out	CE-3F: Telescopic Chute Vent Fan	Fly Ash	30 tons/hr.	NA

## **Applicable Requirements**

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

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

Pollutant: Fugitive Dust

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

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

## **Monitoring Requirements**

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

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

#### **Emission Point ID Number: EP-7A & EP-7B**

## **Associated Equipment**

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EP-7A	- EU-7	Refuse Derived Fuel Storage Bin (SW Corner)	Refuse Derived Fuel (RDF)	10 tons/hr.	97-A-763
EP-7B		Refuse Derived Fuel Storage Bin (NW Corner)	Refuse Derived Fuel (RDF)	10 tons/hr.	97-A-764

## **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limits: 10 %

Authority for Requirement: DNR Construction Permit 97-A-763, 97-A-764

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limits: 0.05 gr/dscf, 5.6 tons/yr

Authority for Requirement: DNR Construction Permit 97-A-763, 97-A-764

Pollutant: PM<sub>10</sub>

Emission Limits: 0.5 lb/hr, 1.4 tons/yr

Authority for Requirement: DNR Construction Permit 97-A-763, 97-A-764

#### **Emission Point Characteristics**

Each emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 58 Stack Size (inches, dia.): 24 X 24 Exhaust Flow Rate (cfm): 3000 Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 97-A-763, 97-A-764

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

Monitoring Requirements  The owner/operator of this equipment shall comply with the monitoring rebelow.	equirements listed
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

#### **Emission Point ID Number: EP-8A & EP-8B**

## **Associated Equipment**

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EP-8A	- EU-8	Refuse Derived Fuel Storage Bin (SE Corner)	Refuse Derived Fuel (RDF)	10 tons/hr.	97-A-765
EP-8B		Refuse Derived Fuel Storage Bin (NE Corner)	Refuse Derived Fuel (RDF)	10 tons/hr.	97-A-766

## **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limits: 10 %

Authority for Requirement: DNR Construction Permit 97-A-765, 97-A-766

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limits: 0.05 gr/dscf, 5.6 tons/yr

Authority for Requirement: DNR Construction Permit 97-A-765, 97-A-766

Pollutant: PM<sub>10</sub>

Emission Limits: 0.5 lb/hr, 1.4 tons/yr

Authority for Requirement: DNR Construction Permit 97-A-765, 97-A-766

#### **Emission Point Characteristics**

Each emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 58 Stack Size (inches, dia.): 24 X 24 Exhaust Flow Rate (cfm): 3000 Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 97-A-765, 97-A-766

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

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

#### **Emission Point ID Number: EP-15**

## **Associated Equipment**

Emission	Emission Unit	Raw	Rated	Construction
Unit	Description	Material	Capacity	Permit
EU-15	Emergency Fire Pump Diesel Engine Exhaust Stack	Diesel	197 BHP 9.7 gal/hr	NA

## **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): Exhaust opacity must not exceed: 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or

lugging modes.

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

40 CFR 60 Subpart IIII 567 IAC 23.1(2)"yyy"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.20 grams/kW-hr. Authority for Requirement: 567 IAC 23.3(2)"a"

40 CFR 60 Subpart IIII 567 IAC 23.1(2)"yyy"

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

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

Pollutant: Carbon Monoxide (CO) Emission Limit(s): 3.5gram/kW-hr.

Authority for Requirement: 40 CFR 60 Subpart IIII

567 IAC 23.1(2)"yyy"

Pollutant: NMHC<sup>(1)</sup> + Nitrogen Oxide (NOx)

Emission Limit(s): 4.0 grams/kW-hr.

Authority for Requirement: 40 CFR 60 Subpart IIII

567 IAC 23.1(2)"yyy"

<sup>(1)</sup>Non-methane hydrocarbon

#### **NESHAP and NSPS**

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this compression ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for this emergency engine under subpart ZZZZ.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

567 IAC 23.1(4)"cz"

## **NSPS Subpart IIII Requirements**

## Fuel Requirements

You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 80.510(b).

#### **Compliance Requirements:**

- 1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
  - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
  - b) Changing only those emission-related settings that are permitted by the manufacturer; and
  - c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
- 2. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).
- 3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test in accordance with 40 CFR 60.4212 to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

# Operating and Recordkeeping Requirements

- 1. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)) and you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 60.4214(b).
- 2. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
- 3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
- 4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

Authority for Requirement: 40 CFR Part 60 Subpart IIII 567 IAC 23.1(2)"yyy"

# **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

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
EU-17	Cooling Tower	CE-17: Mist Eliminator, 0.001%	Water	27,000 gal/min	15-A-210

# **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: DNR Construction Permit 15-A-210

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM) Emission Limits: 0.5 lb/hr., 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-210

567 IAC 23.3(2)"a"(1)

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

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

- A. This unit shall not use chromium based water treatment chemicals.
- B. The total dissolved solids (TDS) content of the water in this cooling tower shall not exceed 3500 ppm.
- C. Maintain a record of any water treatment chemicals used in this unit.
- D. Monitor the TDS content by sampling or conductivity testing at least once per calendar quarter.

Authority for Requirement: DNR Construction Permit 15-A-210

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

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 61.3

Stack Opening (inches, dia.): 336 (each, 2 cells)

Exhaust Flow Rate (scfm): 2,118,000 Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-210

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

# **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)

# **Emission Point ID Number: EP-18**

# Associated Equipment

Emission	Emission Unit	Control	Raw	Rated	Construction
Unit	Description	Equipment	Material	Capacity	Permit
EU-18	Cooling Tower	CE-18: Mist Eliminator, 0.001%	Water	57,000 gal/min	15-A-211

# **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: DNR Construction Permit 15-A-211

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM) Emission Limits: 1.0 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-211

567 IAC 23.3(2)"a"(1)

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

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

- A. This unit shall not use chromium based water treatment chemicals.
- B. The total dissolved solids (TDS) content of the water in this cooling tower shall not exceed 3500 ppm.
- C. Maintain a record of any water treatment chemicals used in this unit.
- D. Monitor the TDS content by sampling or conductivity testing at least once per calendar quarter.

Authority for Requirement: DNR Construction Permit 15-A-211

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

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 61.3

Stack Opening (inches, dia.): 336 (each, 3 cells)

Exhaust Flow Rate (scfm): 4,381,000

Exhaust Temperature (°F): 97

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-211

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

# **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)

# IV. General Conditions

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

# **G1.** Duty to Comply

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

# **G2. Permit Expiration**

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

# G3. Certification Requirement for Title V Related Documents

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

# **G4.** Annual Compliance Certification

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

# **G5. Semi-Annual Monitoring Report**

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

# **G6.** Annual Fee

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

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

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

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

# **G8. Duty to Provide Information**

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

# **G9.** General Maintenance and Repair Duties

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

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

# G10. Recordkeeping Requirements for Compliance Monitoring

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

- 3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
  - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
  - b. Maintain a log at the permitted facility of the scenario under which it is operating.
  - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

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

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

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

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
- 2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a. Any monitoring or testing methods provided in these rules; or
  - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2)

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

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

### G13. Hazardous Release

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

# G14. Excess Emissions and Excess Emissions Reporting Requirements

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

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

# 2. Excess Emissions Reporting

- a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
  - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and expected duration of the excess emission.
  - iv. The cause of the excess emission.
  - v. The steps being taken to remedy the excess emission.
  - vi. The steps being taken to limit the excess emission in the interim period.
- b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
  - i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and duration of the excess emission.
  - iv. The cause of the excess emission.

- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)
- 3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The facility at the time was being properly operated;
  - c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
  - d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

# **G15.** Permit Deviation Reporting Requirements

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

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

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

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

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 22.144(455B));
  - e. The changes comply with all applicable requirements.
  - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 22.110(1)
- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. 567 IAC 22.110(2)
- 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). 567 IAC 22.110(3)
- 4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. 567 IAC 22.110(4)

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

# G18. Duty to Modify a Title V Permit

- 1. Administrative Amendment.
  - a. An administrative permit amendment is a permit revision that does any of the following:
    - i. Correct typographical errors
    - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source:
    - iii. Require more frequent monitoring or reporting by the permittee; or
    - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
  - b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
  - c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.
- 2. Minor Title V Permit Modification.
  - a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
    - i. Do not violate any applicable requirement;
    - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
    - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
    - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
    - v. Are not modifications under any provision of Title I of the Act; and vi. Are not required to be processed as significant modification under rule 567 22.113(455B).
  - b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
    - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- ii. The permittee's suggested draft permit;
- iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

# 3. Significant Title V Permit Modification.

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

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

### **G19. Duty to Obtain Construction Permits**

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

### G20. Asbestos

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

# **G21.** Open Burning

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

# G22. Acid Rain (Title IV) Emissions Allowances

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

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

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle

has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

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

# **G24. Permit Reopenings**

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"
- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is <u>not</u> required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
  - c. Reopening and revision on this ground is <u>not</u> required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"
- 3. A permit shall be reopened and revised under any of the following circumstances:
  - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination; b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement. d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the
  - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - e. The department or the administrator determines that the permit must be revised or

revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)

- 4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)
- 5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3)

### **G25. Permit Shield**

- 1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
  - a. Such applicable requirements are included and are specifically identified in the permit; or
  - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- 2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
- 3. A permit shield shall not alter or affect the following:
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
  - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. 567 IAC 22.108 (18)

# **G26.** Severability

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

# **G27. Property Rights**

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

# **G28.** Transferability

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

### G29. Disclaimer

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

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

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

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

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

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

# G31. Prevention of Air Pollution Emergency Episodes

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

### **G32.** Contacts List

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

Iowa Compliance Officer

Air Branch

Enforcement and Compliance Assurance Division

U.S. EPA Region 7

11201 Renner Blvd.

Lenexa, KS 66219

(913) 551-7020

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

Chief, Air Quality Bureau

Iowa Department of Natural Resources

Wallace State Office Building

502 E 9<sup>th</sup> St.

Des Moines, IA 50319-0034

(515) 725-8200

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

# Field Office 1

1101 Commercial Court, Suite 10 Manchester, IA 52057 (563) 927-2640

### Field Office 3

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

### Field Office 5

Wallace State Office Building 502 E 9<sup>th</sup> St. Des Moines, IA 50319-0034 (515) 725-0268

# **Polk County Public Works Dept.**

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

# Field Office 2

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

### Field Office 4

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

### Field Office 6

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

# **Linn County Public Health**

Air Quality Branch 1020 6<sup>th</sup> Street SE Cedar Rapids, IA 52401 (319) 892-6000

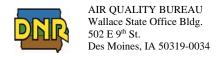
# V. Appendix A

### NSPS and NESHAP Links

- A. 40 CFR 60 Subpart A General Provisions https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A
- B. 40 CFR 60 Subpart D Standards of Performance for Fossil-Fuel-fired Steam Generators for Which Construction Is Commenced After August 17, 1971 <a href="https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-D">https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-D</a>
- C. 40 CFR 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines <a href="https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-IIII">https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-IIII</a>
- D. 40 CFR 63 Subpart A General Provisions https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A
- E. 40 CFR 63 Subpart ZZZZ National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines <a href="https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ">https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ</a>

# VI. Appendix B

# Acid Rain Phase II Permit & Cross-State Air Pollution Rule (CSAPR) Permit



# **Phase II Acid Rain Permit**

Issued to: City of Ames Steam Electric Plant Operated by: Ames Municipal Electric System

ORIS code: 1122

Effective: Five years from issuance

For the Director of the Department of Natural Resources

Mainil Stein 7/25/2023

Marnie Stein, Supervisor of Operating Permits Section Date

# **Acid Rain Permit comprises the following:**

1) Statement of Basis.

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

# 1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with Iowa Code paragraph 455B.133[8"a"], and Titles IV and V of the Clean Air Act, the Iowa Department of Natural Resources (IDNR), Air Quality Bureau, Operating Permit Section issues this permit pursuant to 567 Iowa Administrative Code (IAC) 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.

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

		2023	2024	2025	2026	2027	2028
Unit 7	SO <sub>2</sub> allowances, under Table 2 of 40 CFR part 73.	403*	403*	403*	403*	403*	403*
	NO <sub>x</sub> limit	approves a NO <sub>x</sub> comp (5Years). Uemission rashall not ex which is 0.4	o 40 CFR par standard emi- sliance plan : Under the NO ate for each year acced the appl 40 lbs/mmBtu to the descri are applicable for a NO <sub>x</sub> con	issions limita is effective <sub>x</sub> compliance ear, determine icable emission of for tangenti ibed NO <sub>x</sub> con requirements	ation complia from 7/25/2 plan, this ured in accordation limitation ally fired unit impliance plants of 40 CFR p	nce plan for 2023 through nit's annual a nce with 40 Cunder 40 CFR ts.  n, this unit slart 76, includ	Unit 7. The 7/24/2028 verage NO <sub>x</sub> CFR part 75, 2.76.7(a)(1), hall complying the duty

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

		2023	2024	2025	2026	2027	2028
	SO <sub>2</sub> allowances, under Table 2 of 40 CFR part 73.	1837*	1837*	1837*	1837*	1837*	1837*
Unit 8	NO <sub>x</sub> limit	Pursuant to 40 CFR part 76, The Iowa Department of Natural Resources approves a standard emission limitation compliance plan for Unit 8. The NO <sub>x</sub> compliance plan is effective from 7/25/2023 through 7/24/2028 (5Years)Under the NO <sub>x</sub> compliance plan, this unit's annual average NO <sub>x</sub> emission rate for each year, determined in accordance with 40 CFR part 75 shall not exceed the applicable emission limitation under 40 CFR 76.7(a)(2), which is 0.46 lbs/mmBtu for dry bottom wall-fired units.  In addition to the described NO <sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO <sub>x</sub> compliance plan and the requirements covering excess emissions.					

<sup>\*</sup> The number of allowances allocated to Phase II affected units by U.S. EPA in 40 CFR part 73 Table 2 (Revised May 12, 2005). In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (See 40 CFR 72.84).

# 3) Comments, Notes and Justifications:

Renewal #4 of the Phase II SO<sub>2</sub> and NO<sub>x</sub> permit.

4) **Permit Application:** Attached.





# **Acid Rain Permit Application**

This submission is: new	revised	for ARP permit renewal

For more information, see instructions and 40 CFR 72.30 and 72.31.

#### STEP 1

Identify the facility name, State, and plant (ORIS) code.

City of Ames Steam Electric Plant	IA	1122
Facility (Source) Name	State	Plant Code

#### STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

а	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
Unit 8	Yes
Unit 7	Yes

City of Ames Steam Electric Plant
Facility (Source) Name (from STEP 1)

#### STEP 3 Permit Requirements

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - 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
  - 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:
  - Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - Have an Acid Rain Permit.

#### Monitorina 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 source or unit, as appropriate, 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 sourceshall:
  - Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; 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:
  - Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - 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 72.8(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.

### 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.

City of Ames Steam Electric Plant Facility (Source) Name (from STEP 1)

### STEP 3, Cont'd. Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
  - Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - 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.
  - Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (v) 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.
- (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.
- (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.

# City of Ames Steam Electric Plant Facility (Source) Name (from STEP 1)

#### STEP 3, Cont'd. 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 source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

### STEP 4 Certification

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

Name Dona	ld E. Kom	
Signature	DIEK	Date 9 Nav 212

# Transport Rule (TR) Trading Program Title V Requirements

# **Description of TR Monitoring Provisions**

The TR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following table(s). These unit(s) are subject to the requirements for the TR NO<sub>X</sub> Annual Trading Program, TR NO<sub>X</sub> Ozone Season Group 2 Trading Program and TR SO<sub>2</sub> Group 1 Trading Program.

Unit ID: 7 (ORIS Code: 1122)									
City of Ame	City of Ames Steam Electric Plant - Ames Municipal Electric System								
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO <sub>2</sub> monitoring) and 40 CFR part 75, subpart H (for NO <sub>X</sub> monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil- fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E				
$SO_2$	X								
$NO_X$	X								
Heat input	X								

Unit ID: 8 (ORIS Code:1122)					
City of Ames Steam Electric Plant - Ames Municipal Electric System					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO <sub>2</sub> monitoring) and 40 CFR part 75, subpart H (for NO <sub>X</sub> monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil- fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
$SO_2$	X				
$NO_X$	X				
Heat input	X				

- 1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NO<sub>X</sub> Annual Trading Program), 97.830 through 97.835 (TR NO<sub>X</sub> Ozone Season Group 2 Trading Program), and 97.630 through 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
- 2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <a href="https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources#monMethod">https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources#monMethod</a>.
- 3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NOx Annual Trading Program), 97.835 (TR NOx Ozone Season Group 2 Trading Program) and/or 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <a href="http://www.epa.gov/airmarkets/part-75-petition-responses">http://www.epa.gov/airmarkets/part-75-petition-responses</a>.
- 4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NO<sub>X</sub> Annual Trading Program), 97.830 through 97.834 (TR NO<sub>X</sub> Ozone Season Group 2 Trading Program) and/or 97.630 through 97.634 (TR SO<sub>2</sub> Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NO<sub>X</sub> Annual Trading Program), 97.835 (TR NO<sub>X</sub> Ozone Season Group 2 Trading Program) and/or 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at <a href="http://www.epa.gov/airmarkets/part-75-petition-responses">http://www.epa.gov/airmarkets/part-75-petition-responses</a>.
- 5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NO<sub>X</sub> Annual Trading Program), 97.830 through 97.834 (TR NO<sub>X</sub> Ozone Season Group 2 Trading Program) and 97.630 through 97.634 (TR SO<sub>2</sub> Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

# TR NO<sub>X</sub> Annual Trading Program requirements (40 CFR 97.406)

# (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

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

(1) The owners and operators, and the designated representative, of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall comply with the monitoring,

- reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO<sub>x</sub> Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO<sub>x</sub> Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

# (c) NO<sub>X</sub> emissions requirements.

- (1) TR NO<sub>X</sub> Annual emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Annual units at the source.
  - (ii). If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Annual units at a TR NO<sub>x</sub> Annual source are in excess of the TR NO<sub>x</sub> Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR NO<sub>X</sub> Annual unit at the source shall hold the TR NO<sub>X</sub> Annual allowances required for deduction under 40 CFR 97.424(d); and
    - (B). The owners and operators of the source and each TR NO<sub>x</sub> Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- (2) TR NO<sub>X</sub> Annual assurance provisions.
  - (i). If total NO<sub>X</sub> emissions during a control period in a given year from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>X</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR

NO<sub>x</sub> Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO<sub>x</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in the state for such control period exceed the state assurance level.

- (ii). The owners and operators shall hold the TR NO<sub>X</sub> Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO<sub>X</sub> emissions exceed the sum, for such control period, of the state NO<sub>X</sub> Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>X</sub> emissions from the TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR NO<sub>X</sub> Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
  - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B). Each TR NO<sub>X</sub> Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- (3) Compliance periods.
  - (i). A TR NO<sub>X</sub> Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
  - (ii). A TR NO<sub>X</sub> Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.

- (i). A TR NO<sub>X</sub> Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO<sub>X</sub> Annual allowance that was allocated for such control period or a control period in a prior year.
- (ii). A TR NO<sub>x</sub> Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO<sub>X</sub> Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.
- (6) Limited authorization. A TR NO<sub>X</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>X</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR NO<sub>X</sub> Annual Trading Program; and
  - (ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO<sub>X</sub> Annual allowance does not constitute a property right.

# (d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>X</sub> Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

# (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR  $NO_X$  Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and

- documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
- (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAA.
- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>X</sub> Annual Trading Program.
- (2) The designated representative of a TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall make all submissions required under the TR NO<sub>X</sub> Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

### (f) Liability.

- (1) Any provision of the TR NO<sub>X</sub> Annual Trading Program that applies to a TR NO<sub>X</sub> Annual source or the designated representative of a TR NO<sub>X</sub> Annual source shall also apply to the owners and operators of such source and of the TR NO<sub>X</sub> Annual units at the source.
- (2) Any provision of the TR NO<sub>X</sub> Annual Trading Program that applies to a TR NO<sub>X</sub> Annual unit or the designated representative of a TR NO<sub>X</sub> Annual unit shall also apply to the owners and operators of such unit.

# (g) Effect on other authorities.

No provision of the TR NO<sub>x</sub> Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO<sub>x</sub> Annual source or TR NO<sub>x</sub> Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

# TR NO<sub>X</sub> Ozone Season Group 2 Trading Program Requirements (40 CFR 97.806)

# (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.813 through 97.818.

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

- (1) The owners and operators, and the designated representative, of each TR NOx Ozone Season Group 2 source and each TR NOx Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of TR NOx Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the TR NOx Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c)

below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

# (c) NO<sub>X</sub> emissions requirements.

- (1) TR NO<sub>x</sub> Ozone Season Group 2 emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Ozone Season Group 2 source and each TR NO<sub>X</sub> Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Ozone Season Group 2 units at the source.
  - (ii). If total NOx emissions during a control period in a given year from the TR NOx Ozone Season Group 2 units at a TR NOx Ozone Season Group 2 source are in excess of the TR NOx Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall hold the TR NO<sub>x</sub> Ozone Season Group 2 allowances required for deduction under 40 CFR 97.824(d); and
    - (B). The owners and operators of the source and each TR NOx Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.
- (2) TR NO<sub>X</sub> Ozone Season Group 2 assurance provisions.
  - (i). If total NO<sub>X</sub> emissions during a control period in a given year from all TR NO<sub>X</sub> Ozone Season Group 2 units at TR NO<sub>X</sub> Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>X</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>X</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.825(b), of multiplying—
    - (A). The quotient of the amount by which the common designated representative's share of such NOx emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share

- of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and
- (B). The amount by which total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season Group 2 units at TR NO<sub>X</sub> Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR NO<sub>X</sub> Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NOx emissions from all TR NOx Ozone Season Group 2 units at TR NOx Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NOx emissions exceed the sum, for such control period, of the State NOx Ozone Season Group 2 trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart EEEEE or of the Clean Air Act if total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season Group 2 units at TR NO<sub>X</sub> Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>X</sub> emissions from the TR NO<sub>X</sub> Ozone Season Group 2 units at TR NO<sub>X</sub> Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR NO<sub>x</sub> Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
  - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B). Each TR NOx Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.
- (3) Compliance periods.
  - (i). A TR NO<sub>X</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
  - (ii). A TR NOx Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i). A TR NO<sub>X</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO<sub>X</sub> Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.

- (ii). A TR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO<sub>X</sub> Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart EEEEE.
- (6) Limited authorization. A TR NO<sub>x</sub> Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR NO<sub>X</sub> Ozone Season Group 2 Trading Program; and
  - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO<sub>X</sub> Ozone Season Group 2 allowance does not constitute a property right.

# (d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>X</sub> Ozone Season Group 2 allowances in accordance with 40 CFR part 97, subpart EEEEE.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.806(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

# (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO<sub>X</sub> Ozone Season Group 2 source and each TR NO<sub>X</sub> Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.816 for the designated representative for the source and each TR NO<sub>X</sub> Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new

- certificate of representation under 40 CFR 97.816 changing the designated representative.
- (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart EEEEE.
- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>X</sub> Ozone Season Group 2 Trading Program.
- (2) The designated representative of a TR NO<sub>x</sub> Ozone Season Group 2 source and each TR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall make all submissions required under the TR NO<sub>x</sub> Ozone Season Group 2 Trading Program, except as provided in 40 CFR 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

# (f) Liability.

- (1) Any provision of the TR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a TR NO<sub>x</sub> Ozone Season Group 2 source or the designated representative of a TR NO<sub>x</sub> Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the TR NO<sub>x</sub> Ozone Season Group 2 units at the source.
- (2) Any provision of the TR NO<sub>X</sub> Ozone Season Group 2 Trading Program that applies to a TR NO<sub>X</sub> Ozone Season Group 2 unit or the designated representative of a TR NO<sub>X</sub> Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

# (g) Effect on other authorities.

No provision of the TR NO<sub>X</sub> Ozone Season Group 2 Trading Program or exemption under 40 CFR 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO<sub>X</sub> Ozone Season Group 2 source or TR NO<sub>X</sub> Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

# TR SO<sub>2</sub> Group 1 Trading Program requirements (40 CFR 97.606)

# (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

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

- (1) The owners and operators, and the designated representative, of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO<sub>2</sub> Group 1 allowances under 40 CFR

97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO<sub>2</sub> Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

# (c) SO<sub>2</sub> emissions requirements.

- (1) TR SO<sub>2</sub> Group 1 emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold, in the source's compliance account, TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO<sub>2</sub> emissions for such control period from all TR SO<sub>2</sub> Group 1 units at the source.
  - (ii). If total SO<sub>2</sub> emissions during a control period in a given year from the TR SO<sub>2</sub> Group 1 units at a TR SO<sub>2</sub> Group 1 source are in excess of the TR SO<sub>2</sub> Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold the TR SO<sub>2</sub> Group 1 allowances required for deduction under 40 CFR 97.624(d); and
    - (B). The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (2) TR SO<sub>2</sub> Group 1 assurance provisions.
  - (i). If total SO<sub>2</sub> emissions during a control period in a given year from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO<sub>2</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
    - (A). The quotient of the amount by which the common designated representative's share of such SO<sub>2</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share

- of such SO<sub>2</sub> emissions exceeds the respective common designated representative's assurance level; and
- (B). The amount by which total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR SO<sub>2</sub> Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO<sub>2</sub> emissions exceed the sum, for such control period, of the state SO<sub>2</sub> Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO<sub>2</sub> emissions from the TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR SO<sub>2</sub> Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above.
  - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B). Each TR SO<sub>2</sub> Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (3) Compliance periods.
  - (i). A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
  - (ii). A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i). A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for a control period in

- a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR SO<sub>2</sub> Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.
- (6) Limited authorization. A TR SO<sub>2</sub> Group 1 allowance is a limited authorization to emit one ton of SO<sub>2</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR SO<sub>2</sub> Group 1 Trading Program; and
  - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR SO<sub>2</sub> Group 1 allowance does not constitute a property right.

# (d) Title V permit revision requirements.

- (1) No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO<sub>2</sub> Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E), Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

# (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO<sub>2</sub> Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.
  - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO<sub>2</sub> Group 1 Trading Program.

(2) The designated representative of a TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall make all submissions required under the TR SO<sub>2</sub> Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

# (f) Liability.

- (1) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 source or the designated representative of a TR SO<sub>2</sub> Group 1 source shall also apply to the owners and operators of such source and of the TR SO<sub>2</sub> Group 1 units at the source.
- (2) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 unit or the designated representative of a TR SO<sub>2</sub> Group 1 unit shall also apply to the owners and operators of such unit.

# (g) Effect on other authorities.

No provision of the TR SO<sub>2</sub> Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO<sub>2</sub> Group 1 source or TR SO<sub>2</sub> Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.