

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

**Name of Permitted Facility:** MidAmerican Energy Company:  
Pleasant Hill Combustion Turbines /  
Greater Des Moines Energy Center

**Facility Location:** 4401 Carlisle Road  
Pleasant Hill, Iowa 50327

**Air Quality Operating Permit Number:** 97-TV-006R4

**Expiration Date:** Date

**Permit Renewal Application Deadline:** Date-6 Months

**EIQ Number:** 92-5848

**Facility File Number:** 77-13-002

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**Responsible Official**

**Name:** Mr. Stacy L. Earll  
**Title:** General Manager  
**Mailing Address:** 4299 Northwest Urbandale Drive  
Urbandale, Iowa 50322  
**Phone #:** (515) 281-2654

**Permit Contact Person for the Facility**

**Name:** Mr. Stacy L. Earll  
**Title:** General Manager  
**Mailing Address:** 4299 Northwest Urbandale Drive  
Urbandale, Iowa 50322  
**Phone #:** (515) 281-2654

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

**For the Director of the Department of Natural Resources**

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Marnie Stein, Supervisor of Air Operating Permits Section

Date

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## Abbreviations

acfm.....	actual cubic feet per minute
AERMOD.....	AMS/EPA Regulatory Model
AQD.....	Polk County Public Works- Air Quality Division
CAS.....	Chemical Abstract Service Registry
CE .....	Control Equipment
CEM.....	Continuous Emission Monitor
CFR.....	Code of Federal Regulation
CSAPR.....	Cross-State Air Pollution Rule
DNR .....	Iowa Department of Natural Resources
°F.....	degrees Fahrenheit
EIQ.....	Emissions Inventory Questionnaire
EP.....	Emission Point
EU.....	Emission Unit
gr./dscf .....	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
MACT.....	Maximum Achievable Control Technology
µg/m <sup>3</sup> .....	Micrograms per Cubic Meter
MM BTU/ Hr.....	Million British Thermal Units per Hour
MSDS.....	Material Safety Data Sheet(s)
MVAC.....	Motor Vehicle Air Conditioner
NAICS.....	North American Industry Classification System
NESHAP.....	National Emission Standards for Hazardous Air Pollutants
NSPS .....	New Source Performance Standard
ppmv.....	parts per million by volume
psia.....	pounds per square inch absolute
lb./hr .....	pounds per hour
lb./MMBtu .....	pounds per Million British thermal units
SCC .....	Source Classification Codes
scfm.....	standard cubic feet per minute
sdcfm.....	standard dry cubic feet per minute
SIC.....	Standard Industrial Classification
TPY.....	Tons Per Year
USEPA.....	United States Environmental Protection Agency

**Pollutants**

PM.....Particulate Matter  
PM<sub>10</sub>.....Particulate Matter ten microns or less in diameter  
PM<sub>2.5</sub>.....Particulate Matter 2.5 microns or less in diameter  
SO<sub>2</sub>.....Sulfur dioxide  
NO<sub>x</sub> .....Nitrogen Oxides  
VOC(s).....Volatile Organic Compound(s)  
CO.....Carbon Monoxide  
HAP(s) .....Hazardous Air Pollutant(s)

# I. Facility Description and Equipment List

Facility Name: **MidAmerican Energy Company: Pleasant Hill Combustion Turbines /  
Greater Des Moines Energy Center**

Permit Number: 97-TV-006R4

Facility Description: Electric Services (SIC 4911)

Fossil Fuel Electric Power Generation (NAICS 221112)

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## Equipment List

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Emission Point Number	Emission Unit Number	Emission Unit Description	Construction Permit Number
001	001	Unit 1 Turbine	DNR 93-A-525-S3
002	002	Unit 2 Turbine	DNR 93-A-526-S3
005	005	Unit 3 Turbine	DNR 93-A-527-S5
006	006	Unit 1 Starting Diesel	DNR 93-A-525-S3
007	007	Unit 2 Starting Diesel	DNR 93-A-526-S3
GDMEC-EP 1	GDMEC-EU 1	GDMEC Unit 1 Combustion Turbine	DNR 02-A-048-P3
GDMEC-EP 2	GDMEC-EU 2	GDMEC Unit 2 Combustion Turbine	DNR 02-A-049-P3
GDMEC-EP 3	GDMEC-EU 3	Auxiliary Boiler	DNR 02-A-050-P2
GDMEC-EP 6	GDMEC-EU 6	Emergency Generator (700 kW)	DNR 02-A-054-P2
GDMEC-EP 7	GDMEC-EU 7	Dew Point Heater (7.16 MMBtu/hr)	DNR 02-A-051-P2
GDMEC-EP 20	GDMEC-EU 20	Diesel Fire Pump	DNR 02-A-055-P2

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### Insignificant Activities Equipment List

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Insignificant Emission Unit Number	Insignificant Emission Unit Description
004	Parts Washer
009	Fuel Storage Day Tank for Turbines, (6,440 Gallon Capacity)
010	Glycol Expansion Tank for Unit 1, (85 Gallon Capacity)
011	Glycol Expansion Tank for Unit 2, (85 Gallon Capacity)
012	Glycol Expansion Tank for Unit 3, (96 Gallon Capacity)
013	Lube Oil System for Unit 1, (3,300 Gallon Capacity)
014	Lube Oil System for Unit 2, (3,300 Gallon Capacity)
015	Lube Oil System for Unit 3, (3,300 Gallon Capacity)
016	Day Tank for Unit 1 Diesel Starting Engine, (200 Gallon Capacity)
017	Day Tank for Unit 2 Diesel Starting Engine, (200 Gallon Capacity)
110	Dew Point Heater, (6.0317 MM BTU/ Hr. Natural Gas Fired)
GDMEC-EU 22	Fuel Tank for Emergency Generator, (600 Gallon Capacity)
GDMEC-EU 23	Fuel Tank for Fire Pump, (300 Gallon Capacity)
GDMEC-EU 24	GDMEC Unit 1 Lube Oil Tank, (3,600 Gallon Capacity)
GDMEC-EU 25	GDMEC Unit 2 Lube Oil Tank, (3,600 Gallon Capacity)
GDMEC-EU 26	Steam Turbine Lube Oil System, (3,857 Gallon Capacity)

## II. Plant-Wide Conditions

Facility Name: **MidAmerican Energy Company: Pleasant Hill Combustion Turbines / Greater Des Moines Energy Center**

Permit Number: 97-TV-006R4

Permit conditions are established in accord with 567 Iowa Administrative Code rule 24.108

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### Permit Duration

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

Commencing on: **Date**

Ending on: **Date +5yrs.**

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

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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: Polk County Board of Health Rules and Regulations: Chapter V, Article IV, Section 5-9

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

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

Polk County Board of Health Rules and Regulations: Chapter V, Article IX, Section 5-27 (5)

### Particulate Matter:

5-14. EMISSION OF AIR CONTAMINANTS FROM INDUSTRIAL PROCESSES – GENERALLY.

(1) General. The emission standards contained in this article shall apply to each source operation unless performance standard for the process is specified in Section 5-16, in which case the performance standard shall apply.

(2) Compliance with other requirements. For the purposes of this chapter, Compliance with other requirements, as set forth in 567 IAC 21.9(455B), is adopted by reference.

(3) Particulate matter. No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in Section 5-14, except as provided in Sections 5-17, 5-17.1, 5-18, 5-59, 5-68.1, 5-69.1, 5-70.1, and 5-71.1 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"

Polk County Board of Health Rules and Regulations Chapter V,  
Article VI, Section 5-14.

*Combustion for indirect heating.* Emissions of particulate matter from the combustion of fuel for indirect heating or for power generation shall be limited by the ASME Standard APS-1, Second Edition, November 1968, "Recommended Guide for the Control of Dust Emission—Combustion for Indirect Heat Exchangers." For the purpose of this paragraph, the allowable emissions shall be calculated from equation (15) in that standard, with  $Comax2=50$  micrograms per cubic meter. The maximum ground level dust concentrations designated are above the background level. For plants with 4,000 million Btu/hour input or more, the "a" factor shall be 1.0. In plants with less than 4,000 million Btu/hour input, appropriate "a" factors, less than 1.0, shall be applied. Pertinent correction factors, as specified in the standard, shall be applied for installations with multiple stacks. However, for fuel-burning units in operation on January 13, 1976, the maximum allowable emissions calculated under APS-1 for the facility's equipment configuration on January 13, 1976, shall not be increased even if the changes in the equipment or stack configuration would otherwise allow a recalculation and a higher maximum allowable emission under APS-1.

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

Polk County Board of Health Rules and Regulations Chapter V,  
Article VI, Section 5-14(3)

#### Fugitive Dust:

- (1) 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. 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 that require abatement pursuant to this subrule. Reasonable precautions may include but not be limited to the following procedures:



- a. Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
- b. 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.
- c. 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.
- d. Covering, at all times when in motion, open-bodied trucks transporting materials likely to give rise to airborne dusts;
- e. The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

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

Polk County Board of Health Rules and Regulations Chapter V,  
Article IX, Section 5-23

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### III. Emission Point-Specific Conditions

Facility Name: MidAmerican Energy Company: Pleasant Hill Combustion Turbines /  
Greater Des Moines Energy Center  
Permit Number: 97-TV-006R4

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

##### Associated Equipment

Associated Emission Unit ID Number: 001  
Emissions Control Equipment ID Number: 001  
Emissions Control Equipment Description: Becon 336A2414P001 Water Injection

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Emission Unit vented through this Emission Point: 001  
Emission Unit Description: Unit 1 Combustion Turbine, 45 MW, General Electric PG-6541 (B)  
Raw Material/Fuel: #2 Fuel Oil or Natural Gas  
Rated Capacity: 3,800 gallons/ hr or 560,000 cu. ft./ hr

#### **Applicable Requirements**

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

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

Pollutant: Opacity  
Emission Limit: 20%  
Authority for Requirement: DNR Construction Permit Number: 93-A-525-S3

Pollutant: PM  
Emission Limit: 0.6 lb./ MMBTU  
Authority for Requirement: 567 IAC 23.3 (2)"b"(2)  
DNR Construction Permit Number: 93-A-525-S3  
Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-14 (3)(b)(6)

Pollutant: SO<sub>2</sub>

Emission Limit: 150 ppmvd

Authority for Requirement: 40 CFR 60.333 "a"

567 IAC 23.1 (2) "aa"

DNR Construction Permit Number: 93-A-525-S3

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

Pollutant: SO<sub>2</sub>

Emission Limit: 2.5 lb./ MMBTU

Authority for Requirement: Polk County Board of Health Rules and Regulations: Chapter V,  
Article IX, Section 5-27 (2) (b)

Pollutant: NO<sub>x</sub>

Emission Limits: 173.0 lb./hr; 125 TPY (combined total for Unit 1 & Unit 2); and 75 ppmvd  
Distillate fuel; 0.03% fuel-bound nitrogen, peak loading. NO<sub>x</sub> emission rates  
are corrected to 15% O<sub>2</sub> and include the heat rate correction and fuel bound  
nitrogen correction found in NSPS, Subpart GG. Allowable concentrations  
found in NSPS; Subpart GG are ISO standard day conditions.

Authority for Requirement: 40 CFR 60.332 (a) (1)

567 IAC 23.1 (2) "aa"

DNR Construction Permit Number: 93-A-525-S3

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

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 & Requirements**

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

Hours of operation: Unit 1 and Unit 2 (permitted as 93-A-525-S3 and 93-A-526-S3) are limited to a combined total of 1,445 turbine operating hours of operation per twelve month rolling period. One turbine operating hour is defined as one turbine operating for one hour. For PSD applicability purposes only, this results in a total "potential-to-emit" for NO<sub>x</sub> from the two units of 125 TPY. The total number of hours for both units shall be summed up each twelve month period and each month a new twelve month total calculated.

Process throughput: This unit shall only combust pipeline quality natural gas or # 2 fuel oil. Fuel oil shall contain no more than 0.03% fuel-bound nitrogen or 0.05% sulfur by weight.

Authority for Requirement: DNR Construction Permit Number: 93-A-525-S3

## NSPS Requirements:

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. 40 CFR 60.7(b)

The permittee shall submit an excess emissions and monitoring systems performance report to the Department and Administrator in accordance with 40 CFR 60.7(c). The summary report form shall contain the information and format required in 40 CFR 60.7(d).

Notwithstanding the frequency of reporting requirements in the prior permit conditions, the permittee may reduce the frequency of reporting of excess emissions and monitoring system performance reports pursuant to 40 CFR 60.7(e).

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

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

Authority for Requirement: 567 IAC 23.1(2)

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

## Reporting & Record keeping:

### Record keeping:

The following records shall be maintained on site for five (5) years and be made available for inspection by representatives of AQD.

1) The total number of hours for Unit 1 and Unit 2 shall be summed up each twelve-month period and each month a new twelve-month total calculated.

Authority for Requirement: DNR Construction Permit Number: 93-A-525-S3

- 2). Sulfur and nitrogen contents of the fuel being fired shall be monitored in compliance with 40 CFR 60.334(b) and 60.335(d) and (e).
- 3). The frequency of determining the sulfur and nitrogen content of the fuel shall be in compliance with 40 CFR 60.334(i).
- 4). Excess emissions of NO<sub>x</sub> shall be reported in compliance with 40 CFR 60.334(j)(1).
- 5). Excess emissions of SO<sub>2</sub> shall be reported in compliance with 40 CFR 60.334(j)(2).
- 6). Periods of excess ice fog shall be reported in compliance with 40 CFR 60.334(j)(3).
- 7). Periods of emergency fuel shall be reported in compliance with 40 CFR 60.334(j)(4).

Authority for Requirement: 40 CFR 60 Subpart GG

567 IAC 23.1(2)"aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16(14)

- 8) A written log showing hours of operation, by month and by unit, shall be maintained and be made available to representatives of the EPA, Iowa DNR, or Polk County upon request.

Authority for Requirement: 40 CFR 60.7(b)

567 IAC 23.1 (2) "aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

- 9) Measurements shall be recorded in a suitable form for inspection.

Authority for Requirement: 40 CFR 60.7(f)

567 IAC 23.1 (2) "aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

- 10) A continuous monitoring system shall be installed and operated to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine, as required in 40 CFR 60.334(a).

Authority for Requirement: 40 CFR 60.334(a)

567 IAC 23.1 (2) "aa"

DNR Construction Permit Number: 93-A-525-S3

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

### **Emission Point Characteristics**

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

Stack Height (feet): 35.5

Stack Diameter (inches): 162 x 126

Stack Exhaust Flow Rate (acfm): 716,000

Stack Temperature (°F): 1,071

Vertical, Unobstructed Discharge: Yes ☒ No ☐

Authority for Requirement: DNR Construction Permit Number: 93-A-525-S3

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

### **Monitoring Requirements**

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

#### **Visible Emissions Monitoring:**

Visible Emissions (VE) shall be observed from EP 001 at least once per week when the Unit 1 Turbine (EU 001) is operated on #2 Fuel Oil, to ensure none occur during the operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight (8) hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than or equal to 20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a VE observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake VE readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, a VE observation shall be made during the next operating day where weather permits. No VE readings are required when the Unit 1 Turbine combusts natural gas only.

Reporting & Record keeping: Maintain a written record of the observation and any action resulting from the observation. Records required shall be maintained on-site for five (5) years and be made available to representatives of Polk County AQD upon request.

Authority for Requirement: 567 IAC 24.108(14)

Low Mass Emissions Monitoring

Pollutant – Nitrogen Oxides (NO<sub>x</sub>), and Sulfur Dioxide (SO<sub>2</sub>)

Operational Specifications - 40 CFR 75.19 - Low Mass Emissions (LME)

Initial System Calibration/Quality Assurance - NA

Ongoing System Calibration/Quality Assurance - NA

Reporting & Record keeping - 40 CFR 75.19 - Low Mass Emissions (LME)

Authority for Requirement - 40 CFR 75.19 - Low Mass Emissions (LME)  
567 IAC 25.2 and 567 IAC 23.1(2)

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

**Compliance Assurance Monitoring Plan for Emission Unit 001 –  
MidAmerican Energy: Pleasant Hill/ GDMEC CTs**

**I. Background**

- A. Emission Unit Description: Unit 1 Combustion Turbine, 45 MW,  
General Electric PG-6541 (B)  
(EU 001 / CE 001 / EP 001)  
Associated Emission Unit ID Number: 001  
Emissions Control Equipment ID Number: CE001
- B. Applicable Regulation, Emission Limit, and Monitoring Requirements  
Regulation: 40 CFR 60 Subpart GG  
DNR Permit # 93-A-525-S3  
NO<sub>x</sub> emission limit: 173.0 lb./ hr; 125 TPY (combined total for Unit 1 &  
Unit 2); and 75 ppmvd. Distillate fuel; 0.03% fuel-bound nitrogen, peak loading.  
NO<sub>x</sub> emission rates are corrected to 15% O<sub>2</sub> and include the heat rate correction  
and fuel bound nitrogen correction found in NSPS, Subpart GG. Allowable  
concentrations found in NSPS; Subpart GG are ISO standard day conditions.  
Monitoring requirements: The water-to-fuel ratio shall be monitored  
according to 40 CFR 60.334(a).
- C. Control Technology: Water Injection NO<sub>x</sub> control

**II. Monitoring Approach:**

- A. Continuous Emissions Monitoring:  
None.

B. General

- Monitoring will be completed during unit operation.

C. Water Injection Ratio

- The water injection ratio will be continuously monitored via the plant control system. The control system monitors the fuel flow and the water injection flow to the unit. The water injection rate is automatically adjusted to maintain the proper water injection ratio. The required water injection rates were determined by NO<sub>x</sub> emissions testing. Corrective action measures will be implemented when the water injection ratio is less than the ratio established with the compliance test. Corrective action measures include an alarm indicating a problem with the water injection system, and automatic load reduction. The automatic load reduction will reduce the fuel input to the turbine until the proper water injection ratio is attained. If water flow is not sensed by the control system, unit load will be reduced to a level below the level at which water injection is required to maintain compliance with the applicable NO<sub>x</sub> emission limit.



#### D. Record Keeping and Reporting

- Water injection ratio during operation
- Maintain a written or electronic record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

#### E. Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.
- A spare parts inventory is maintained by a computerized inventory management system.

#### F. Rationale for the Proposed Elements of the Monitoring:

- MidAmerican will use the water injection ratio to continuously monitor the combustion turbine equipment.
- Proper operation of the water injection is essential to maintaining effective NO<sub>x</sub> control. The water injection ratio established during initial compliance testing is monitored and alarmed when the minimum water injection ratio is not being met.
- Compliance with the NO<sub>x</sub> limits during periods of proper operation of the water injection system has been demonstrated via compliance testing. There have been no changes to the unit or to the water injection system that would cause significant changes in performance to the turbine.

Authority for Requirement: 567 IAC 24.108(3)

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

### **Associated Equipment**

Associated Emission Unit ID Number: 002

Emissions Control Equipment ID Number: 002

Emissions Control Equipment Description: Becon 336A2414P001 Water Injection

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Emission Unit vented through this Emission Point: 002

Emission Unit Description: Unit 2 Combustion Turbine, 45 MW, General Electric PG-6541 (B)

Raw Material/Fuel: #2 Fuel Oil or Natural Gas

Rated Capacity: 3,800 gallons/ hr or 510,000 cu. ft./ hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: DNR Construction Permit Number: 93-A-526-S3

Pollutant: PM

Emission Limit: 0.6 lb./ MMBTU

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

DNR Construction Permit Number: 93-A-526-S3

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-14 (3)(b)(6)

Pollutant: SO<sub>2</sub>

Emission Limit: 150 ppmvd

Authority for Requirement: 40 CFR 60.333(a)

567 IAC 23.1 (2)"aa"

DNR Construction Permit Number: 93-A-526-S3

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

Pollutant: SO<sub>2</sub>

Emission Limit: 2.5 lb./ MMBTU

Authority for Requirement: Polk County Board of Health Rules and Regulations: Chapter V, Article IX, Section 5-27 (2) (b)

Pollutant: NO<sub>x</sub>

Emission Limits: 173.0 lb./ hr; 125 TPY (combined total for Unit 1 & Unit 2); and 75 ppmvd Distillate fuel; 0.03% fuel-bound nitrogen, peak loading. NO<sub>x</sub> emission rates are corrected to 15% O<sub>2</sub> and include the heat rate correction and fuel bound nitrogen correction found in NSPS, Subpart GG. Allowable concentrations found in NSPS; Subpart GG are ISO standard day conditions.

Authority for Requirement: 40 CFR 60.332 (a)(1)  
567 IAC 23.1 (2)"aa"

DNR Construction Permit Number: 93-A-526-S3

Polk County Board of Health Rules and Regulations: Chapter V, Article VI, Section 5-16 (14)

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 & Requirements**

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

Hours of operation: Unit 1 and Unit 2 (permitted as 93-A-525-S3 and 93-A-526-S3) are limited to a combined total of 1,445 turbine operating hours of operation per twelve month rolling period. One turbine operating hour is defined as one turbine operating for one hour. For PSD applicability purposes only, this results in a total "potential-to-emit" for NO<sub>x</sub> from the two units of 125 TPY. The total number of hours for both units shall be summed up each twelve month period and each month a new twelve month total calculated.

Process throughput: This unit shall only combust pipeline quality natural gas or # 2 fuel oil. Fuel oil shall contain no more than 0.03% fuel-bound nitrogen or 0.05% sulfur by weight.

Authority for Requirement: DNR Construction Permit Number: 93-A-526-S3

## NSPS Requirements:

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. 40 CFR 60.7(b)

The permittee shall submit an excess emissions and monitoring systems performance report to the Department and Administrator in accordance with 40 CFR 60.7(c). The summary report form shall contain the information and format required in 40 CFR 60.7(d).

Notwithstanding the frequency of reporting requirements in the prior permit conditions, the permittee may reduce the frequency of reporting of excess emissions and monitoring system performance reports pursuant to 40 CFR 60.7(e).

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

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

Authority for Requirement: 567 IAC 23.1(2)

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

## **Reporting & Record keeping:**

### **A) Recordkeeping:**

The following records shall be maintained on site for five (5) years and be made available for inspection by representatives of AQD.

- 1) The total number of hours for Unit 1 and Unit 2 shall be summed up each twelve month period and each month a new twelve month total calculated.

Authority for Requirement: DNR Construction Permit Number: 93-A-526-S3

- 2). Sulfur and nitrogen contents of the fuel being fired shall be monitored in compliance with 40 CFR 60.334(b) and 60.335(d) and (e).
- 3). The frequency of determining the sulfur and nitrogen content of the fuel shall be in compliance with 40 CFR 60.334(i).
- 4). Excess emissions of NO<sub>x</sub> shall be reported in compliance with 40 CFR 60.334(j)(1).
- 5). Excess emissions of SO<sub>2</sub> shall be reported in compliance with 40 CFR 60.334(j)(2).
- 6). Periods of excess ice fog shall be reported in compliance with 40 CFR 60.334(j)(3).
- 7). Periods of emergency fuel shall be reported in compliance with 40 CFR 60.334(j)(4).

Authority for Requirement: 40 CFR 60 Subpart GG

567 IAC 23.1(2)"aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16(14)

- 8) A written log showing hours of operation, by month and by unit, shall be maintained and be made available to representatives of the EPA, DNR, or Polk County upon request.

Authority for Requirement: 40 CFR 60.7(b)

567 IAC 23.1 (2) "aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

- 9) Measurements shall be recorded in a suitable form for inspection.

Authority for Requirement: 40 CFR 60.7(f)

567 IAC 23.1 (2) "aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

- 10) A continuous monitoring system shall be installed and operated to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine, as required in 40 CFR 60.334(a).

Authority for Requirement: 40 CFR 60.334(a)

567 IAC 23.1 (2) "aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

**Emission Point Characteristics**

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

Stack Height (feet): 35.5

Stack Dimensions (inches): 162 x 126

Stack Exhaust Flow Rate (acfm): 716,000

Stack Temperature (°F): 1,071

Vertical, Unobstructed Discharge: Yes ☒ No ☐

Authority for Requirement: DNR Construction Permit Number: 93-A-526-S3

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

**Monitoring Requirements**

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

**Visible Emissions Monitoring:**

Visible Emissions (VE) shall be observed from EP 002 at least once per week when the Unit 2 Turbine (EU 002) is operated on #2 Fuel Oil, to ensure none occur during the operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight (8) hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than or equal to 20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a VE observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake VE readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, a VE observation shall be made during the next operating day where weather permits. No VE readings are required when the Unit 2 Turbine combusts natural gas only.

Reporting & Record keeping: Maintain a written record of the observation and any action resulting from the observation. Records required shall be maintained on-site for five (5) years and be made available to representatives of Polk County AQD upon request.

Authority for Requirement: 567 IAC 24.108(14)

Low Mass Emissions Monitoring

Pollutant – Nitrogen Oxides (NO<sub>x</sub>), and Sulfur Dioxide (SO<sub>2</sub>)

Operational Specifications - 40 CFR 75.19 - Low Mass Emissions (LME)

Initial System Calibration/Quality Assurance - NA

Ongoing System Calibration/Quality Assurance - NA

Reporting & Record keeping - 40 CFR 75.19 - Low Mass Emissions (LME)

Authority for Requirement - 40 CFR 75.19 - Low Mass Emissions (LME)  
567 IAC 25.2 and 567 IAC 23.1(2)

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

**Compliance Assurance Monitoring Plan for Emission Unit 002 –  
MidAmerican Energy: Pleasant Hill/ GDMEC CTs**

**I. Background**

- A. Emission Unit Description: Unit 2 Combustion Turbine, 45 MW,  
General Electric PG-6541 (B)  
(EU 002 / CE 002 / EP 002)  
Associated Emission Unit ID Number: 002  
Emissions Control Equipment ID Number: CE 002
- B. Applicable Regulation, Emission Limit, and Monitoring Requirements  
Regulation: 40 CFR 60 Subpart GG  
DNR Permit # 93-A-526-S3  
NO<sub>x</sub> emission limit: 173.0 lb./ hr; 125 TPY (combined total for Unit 1 &  
Unit 2); and 75 ppmvd. Distillate fuel; 0.03% fuel-bound nitrogen, peak loading.  
NO<sub>x</sub> emission rates are corrected to 15% O<sub>2</sub> and include the heat rate correction  
and fuel bound nitrogen correction found in NSPS, Subpart GG. Allowable  
concentrations found in NSPS; Subpart GG are ISO standard day conditions.  
Monitoring requirements: The water-to-fuel ratio shall be monitored  
according to 40 CFR 60.334(a).
- C. Control Technology: Water Injection NO<sub>x</sub> control

**II. Monitoring Approach:**

- A. Continuous Emissions Monitoring:  
None.

B. General

- Monitoring will be completed during unit operation.

C. Water Injection Ratio

- The water injection ratio will be continuously monitored via the plant control system. The control system monitors the fuel flow and the water injection flow to the unit. The water injection rate is automatically adjusted to maintain the proper water injection ratio. The required water injection rates were determined by NO<sub>x</sub> emissions testing. Corrective action measures will be implemented when the water injection ratio is less than the ratio established with the compliance test. Corrective action measures include an alarm indicating a problem with the water injection system, and automatic load reduction. The automatic load reduction will reduce the fuel input to the turbine until the proper water injection ratio is attained. If water flow is not sensed by the control system, unit load will be reduced to a level below the level at which water injection is required to maintain compliance with the applicable NO<sub>x</sub> emission limit.



#### D. Record Keeping and Reporting

- Water injection ratio during operation
- Maintain a written or electronic record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

#### E. Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.
- A spare parts inventory is maintained by a computerized inventory management system.

#### F. Rationale for the Proposed Elements of the Monitoring:

- MidAmerican will use the water injection ratio to continuously monitor the combustion turbine equipment.
- Proper operation of the water injection is essential to maintaining effective NO<sub>x</sub> control. The water injection ratio established during initial compliance testing is monitored and alarmed when the minimum water injection ratio is not being met.
- Compliance with the NO<sub>x</sub> limits during periods of proper operation of the water injection system has been demonstrated via compliance testing. There have been no changes to the unit or to the water injection system that would cause significant changes in performance to the turbine.

Authority for Requirement: 567 IAC 24.108(3)

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## **Emission Point ID Number: 005**

### Associated Equipment

Associated Emission Unit ID Number: 005

Emissions Control Equipment ID Number: 003

Emissions Control Equipment Description: Hebeler Welding Co. Model WI-299 Water Injection

Monitoring Equipment Numbers: ME001- Fuel Oil Flow Meter,  
ME001B - Natural Gas Fuel Flow Meter

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Emission Unit vented through this Emission Point: 005

Emission Unit Description: Unit 3 Combustion Turbine, 90.1 MW  
General Electric PG-7111(EA)

Raw Material/Fuel: #2 Fuel Oil or Natural Gas

Rated Capacity: 6,970 gallons/ hr or 1,020,000 cu. ft./ hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: DNR Construction Permit Number: 93-A-527-S5

Pollutant: PM

Emission Limit: 0.6 lb./ MMBTU

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

DNR Construction Permit Number: 93-A-527-S5

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-14 (3)(b)(6)

Pollutant: SO<sub>2</sub>

Emission Limits: 150 ppmvd

Sulfur Dioxide Allowances

Authority for Requirement: 40 CFR 60.333 (a)

(Attached Phase II Acid Rain Permit)

567 IAC 24.108 (7)

567 IAC 23.1 (2) "aa"

DNR Construction Permit Number: 93-A-527-S5

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

Pollutant: SO<sub>2</sub>

Emission Limit: 2.5 lb./ MMBTU

Authority for Requirement: Polk County Board of Health Rules and Regulations: Chapter V,  
Article IX, Section 5-27 (2) (b)

Pollutant: NO<sub>x</sub>

Emission Limits: 289.0 lb./ hr; 123.7 TPY; and 75 ppmvd

Distillate fuel; 0.03% fuel-bound nitrogen, peak loading. NO<sub>x</sub> emission rates are corrected to 15% O<sub>2</sub> and include the heat rate correction and fuel bound nitrogen correction found in NSPS, Subpart GG. Allowable concentrations found in NSPS; Subpart GG are ISO standard day conditions.

Authority for Requirement: 40 CFR 60.332 (a) (1)

567 IAC 23.1 (2) "aa"

DNR Construction Permit Number: 93-A-527-S5

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

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 & Requirements**

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

Hours of operation: Unit 3 is limited to 856 hours of operation per twelve month rolling period. For PSD applicability purposes only, this results in a total "potential-to-emit" for NO<sub>x</sub> from the unit of 123.7 TPY. The number of hours operated for this unit shall be summed up each twelve month period and each month a new twelve month total calculated.

Process throughput: This unit shall only combust pipeline quality natural gas or # 2 fuel oil. Fuel oil shall contain no more than 0.03% fuel-bound nitrogen or 0.05% sulfur by weight.

**NSPS Requirements:**

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. 40 CFR 60.7(b)

The permittee shall submit an excess emissions and monitoring systems performance report to the Department and Administrator in accordance with 40 CFR 60.7(c). The summary report form shall contain the information and format required in 40 CFR 60.7(d).

Notwithstanding the frequency of reporting requirements in the prior permit conditions, the permittee may reduce the frequency of reporting of excess emissions and monitoring system performance reports personate to 40 CFR 60.7(e).

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

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

Authority for Requirement: 567 IAC 23.1(2)  
Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

**Reporting & Record keeping:**

**Recordkeeping:**

The following records shall be maintained on site for five (5) years and be made available for inspection by representatives of AQD.

1) The total number of hours for Unit 3 shall be summed up each twelve month period and each month a new twelve month total calculated.

Authority for Requirement: DNR Construction Permit Number:: 93-A-527-S5

- 2). Sulfur and nitrogen contents of the fuel being fired shall be monitored in compliance with 40 CFR 60.334(b) and 60.335(d) and (e).
- 3). The frequency of determining the sulfur and nitrogen content of the fuel shall be in compliance with 40 CFR 60.334(i).
- 4). Excess emissions of NO<sub>x</sub> shall be reported in compliance with 40 CFR 60.334(j)(1).
- 5). Excess emissions of SO<sub>2</sub> shall be reported in compliance with 40 CFR 60.334(j)(2).
- 6). Periods of excess ice fog shall be reported in compliance with 40 CFR 60.334(j)(3).
- 7). Periods of emergency fuel shall be reported in compliance with 40 CFR 60.334(j)(4).

Authority for Requirement: 40 CFR 60 Subpart GG

567 IAC 23.1(2)"aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

- 8) A written log showing hours of operation, by month and by unit, shall be maintained and be made available to representatives of the EPA, Iowa DNR, or Polk County upon request.

Authority for Requirement: 40 CFR 60.7(b)

567 IAC 23.1 (2)"aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

- 9) Measurements shall be recorded in a suitable form for inspection.

Authority for Requirement: 40 CFR 60.7(f)

567 IAC 23.1 (2) "aa"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

- 10) A continuous monitoring system shall be installed and operated to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine, as required in 40 CFR 60.334(a).

Authority for Requirement: 40 CFR 60.334(a)

567 IAC 23.1 (2) "aa"

DNR Construction Permit Number: 93-A-527-S5

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

### **Emission Point Characteristics**

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

Stack Height (feet): 52.0

Stack Diameter (inches): 104 x 208

Stack Exhaust Flow Rate (scfm): 500,409

Stack Temperature (°F): 1,052

Vertical, Unobstructed Discharge: Yes- ☒ No ☐

Authority for Requirement: DNR Construction Permit Number: 93-A-527-S5

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

### **Monitoring Requirements**

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

#### **Visible Emissions Monitoring:**

Visible Emissions (VE) shall be observed from EP 005 at least once per week when the Unit 3 Turbine (EU 005) is operated on #2 Fuel Oil, to ensure none occur during the operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than eight (8) hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than or equal to 20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting a VE observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake VE readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, a VE observation shall be made during the next operating day where weather permits. No VE readings are required when the Unit 3 Turbine combusts natural gas only.

Reporting & Record keeping: Maintain a written record of the observation and any action resulting from the observation. Records required shall be maintained on-site for five (5) years and be made available to representatives of Polk County AQD upon request.

Authority for Requirement: 567 IAC 24.108(14)

## Predictive Emission Monitoring

Pollutant - NO<sub>x</sub>

Operational Specifications - 0.236 lb./ MMBTU

Initial System Calibration/Quality Assurance - 01/17-20/95

Ongoing System Calibration/Quality Assurance - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Reporting & Record keeping - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Authority for Requirement - 40 CFR 75, Appendix E, 40 CFR 60 Subpart A and Subpart D

567 IAC 25.2 and 567 IAC 23.1(2)

Pollutant - SO<sub>2</sub>

Operational Specifications - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Initial System Calibration/Quality Assurance - 01/17-20/95

Ongoing System Calibration/Quality Assurance - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Reporting & Record keeping - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Authority for Requirement - 40 CFR 75, Appendix D, 40 CFR 60 Subpart A and Subpart D

567 IAC 25.2 and 567 IAC 23.1(2)

## Other Parameters

Parameter - CO<sub>2</sub>

Operational Specifications - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Initial System Calibration/Quality Assurance - 01/17-20/95

Ongoing System Calibration/Quality Assurance - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Reporting & Record keeping - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Authority for Requirement - 40 CFR 75 Appendix G, 40 CFR 60 Subpart A and Subpart D

567 IAC 25.2 and 567 IAC 23.1(2)

Parameter - Oil Flow

Operational Specifications - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Initial System Calibration/ Quality Assurance - 2/24/94

Ongoing System Calibration/Quality Assurance - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Reporting & Record keeping - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Authority for Requirement - 40 CFR 75 Appendix D, 40 CFR 60 Subpart A and Subpart D

567 IAC 25.2 and 567 IAC 23.1(2)

Parameter – Natural Gas Flow

Operational Specifications - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Initial System Calibration/ Quality Assurance - 2/24/94

Ongoing System Calibration/Quality Assurance - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Reporting & Record keeping - 40 CFR 75, 40 CFR 60 Subpart A and Subpart D

Authority for Requirement - 40 CFR 75 Appendix D, 40 CFR 60 Subpart A and Subpart D

567 IAC 25.2 and 567 IAC 23.1(2)

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

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

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

Authority for Requirement: 567 IAC 24.108(3)



**Compliance Assurance Monitoring Plan for Emission Unit 005 –  
MidAmerican Energy: Pleasant Hill/ GDMEC CTs**

**I. Background**

- A. Emission Unit Description: Unit 3 Combustion Turbine, 90.1 MW  
General Electric PG-7111(EA)  
(EU 005 / CE 003 / EP 005)  
Associated Emission Unit ID Number: 005  
Emissions Control Equipment ID Number: CE 003
- B. Applicable Regulation, Emission Limit, and Monitoring Requirements  
Regulation: 40 CFR 60 Subpart GG  
DNR Permit # 93-A-527-S5  
NO<sub>x</sub> emission limit: 289.0 lb./ hr; 123.7 TPY; and 75 ppmvd  
Distillate fuel; 0.03% fuel-bound nitrogen, peak loading. NO<sub>x</sub> emission rates are corrected to 15% O<sub>2</sub> and include the heat rate correction and fuel bound nitrogen correction found in NSPS, Subpart GG. Allowable concentrations found in NSPS; Subpart GG are ISO standard day conditions.  
Monitoring requirements: The water-to-fuel ratio shall be monitored according to 40 CFR 60.334(a).
- C. Control Technology: Water Injection NO<sub>x</sub> control

**II. Monitoring Approach:**

- A. Continuous Emissions Monitoring:  
None.

B. General

- Monitoring will be completed during unit operation.

C. Water Injection Ratio

The water injection ratio will be continuously monitored via the plant control system. The control system monitors the fuel flow and the water injection flow to the unit. The water injection rate is automatically adjusted to maintain the proper water injection ratio. The required water injection rates were determined by NO<sub>x</sub> emissions testing. Corrective action measures will be implemented when the water injection ratio is less than the ratio established with the compliance test. Corrective action measures include an alarm indicating a problem with the water injection system, and automatic load reduction. The automatic load reduction will reduce the fuel input to the turbine until the proper water injection ratio is attained. If water flow is not sensed by the control system, unit load will be reduced to a level below the level at which water injection is required to maintain compliance with the applicable NO<sub>x</sub> emission limit.

#### D. Record Keeping and Reporting

- Water injection ratio during operation
- Maintain a written or electronic record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

#### E. Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.
- A spare parts inventory is maintained by a computerized inventory management system.

#### F. Rationale for the Proposed Elements of the Monitoring:

- MidAmerican will use the water injection ratio to continuously monitor the combustion turbine equipment.
- Proper operation of the water injection is essential to maintaining effective NO<sub>x</sub> control. The water injection ratio established during initial compliance testing is monitored and alarmed when the minimum water injection ratio is not being met.
- Compliance with the NO<sub>x</sub> limits during periods of proper operation of the water injection system has been demonstrated via compliance testing. There have been no changes to the unit or to the water injection system that would cause significant changes in performance to the turbine.

Authority for Requirement: 567 IAC 24.108(3)

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

### Associated Equipment

Emission Unit vented through this Emission Point: 006  
Emission Unit Description: Unit 1 Starting Diesel Engine  
Raw Material/Fuel: #2 Distillate Fuel Oil  
Rated Capacity: 40 gallons/ hr

### **Applicable Requirements**

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

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

Pollutant: Opacity  
Emission Limits: 20%  
Authority for Requirement: DNR Construction Permit Number: 93-A-525-S3

Pollutant: PM  
Emission Limit: 0.6 lb./ MMBTU  
Authority for Requirement: 567 IAC 23.3 (2)b(2)  
DNR Construction Permit Number: 93-A-525-S3  
Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-14 (3)(b)(6)

Pollutant: SO<sub>2</sub>  
Emission Limit: 2.5 lb./ MMBTU  
Authority for Requirement: Polk County Board of Health Rules and Regulations: Chapter V,  
Article IX, Section 5-27 (2) (b)

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

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

#### Process throughput:

- No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

*The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of AQD:*

- The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 24.108(3)

NESHAP:

The black start 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)(1)(iii) this black start engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

Operation and Maintenance Requirements 40 CFR 63.6603, 63.6625, and Tables 2d and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or 1 year + 30 days, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Notification and Reporting Requirements 40 CFR 63.6645 and 6650

1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. Comply with applicable notification requirements in 40 CFR 63.6645 and reporting requirements in 40 CFR 63.6650.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.
2. Comply with applicable recordkeeping requirements in 40 CFR 63.6655.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

567 IAC 23.1(4)"cz"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VIII, Section 5-20

**Monitoring Requirements**

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

*Periodic Monitoring is not required at this time. Periodic Monitoring will be required if the equipment is operated more than 876 hours per 12 month period, rolled monthly.*

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

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## **Emission Point ID Number: 007**

### **Associated Equipment**

Emission Unit vented through this Emission Point: 007

Emission Unit Description: Unit 2 Starting Diesel

Raw Material/Fuel: #2 Distillate Fuel Oil

Rated Capacity: 40 gallons/ hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limits: 20%

Authority for Requirement: DNR Construction Permit Number: 93-A-526-S3

Pollutant: PM

Emission Limit: 0.6 lb./ MMBTU

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

DNR Construction Permit Number: 93-A-526-S3

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-14 (3)(b)(6)

Pollutant: SO<sub>2</sub>

Emission Limit: 2.5 lb./ MMBTU

Authority for Requirement: Polk County Board of Health Rules and Regulations: Chapter V,  
Article IX, Section 5-27 (2) (b)

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

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

#### **Process throughput:**

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

*The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of AQD:*

- The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 24.108(3)

NESHAP:

The black start 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)(1)(iii) this black start engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

Operation and Maintenance Requirements 40 CFR 63.6603, 63.6625, and Tables 2d and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or 1 year + 30 days, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Notification and Reporting Requirements 40 CFR 63.6645 and 6650

1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. Comply with applicable notification requirements in 40 CFR 63.6645 and reporting requirements in 40 CFR 63.6650.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.
2. Comply with applicable recordkeeping requirements in 40 CFR 63.6655.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

567 IAC 23.1(4)"cz"

Polk County Board of Health Rules and Regulations: Chapter V,  
Article VIII, Section 5-20

**Monitoring Requirements**

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

*Periodic Monitoring is not required at this time. Periodic Monitoring will be required if the equipment is operated more than 876 hours per 12 month period, rolled monthly.*

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

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

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

Authority for Requirement: 567 IAC 24.108(3)



## Emission Point ID Numbers: GDMEC EP-1 and GDMEC EP-2

### Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Monitoring Equipment	Raw Material	Rated Capacity	Construction Permit
GDMEC EP-1	GDMEC EU-1	GDMEC Unit 1 Combustion Turbine	GDMEC CE-01: Low NO <sub>x</sub> Burner SCR GDMEC CE-02: CO Catalyst	GDMEC-ME 1A: NO <sub>x</sub> monitor, GDMEC-ME 1B: Diluent O <sub>2</sub> monitor, GDMEC-ME 1C: Fuel flow meter, and GDMEC-ME 1D: CO monitor	Natural Gas	1928 MMBtu/hr (HHV @ base load and ISO conditions)	02-A-048-P3
GDMEC EP-2	GDMEC EU-2	GDMEC Unit 2 Combustion Turbine	GDMEC CE-03: Low NO <sub>x</sub> Burner SCR GDMEC CE-04: CO Catalyst	GDMEC-ME 2A: NO <sub>x</sub> monitor, GDMEC-ME 2B: Diluent O <sub>2</sub> monitor, GDMEC-ME 2C: Fuel flow meter, and GDMEC-ME 2D: CO monitor	Natural Gas	1928 MMBtu/hr (HHV @ base load and ISO conditions)	02-A-049-P3

### 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 Limit: 0%<sup>(1)</sup>

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3

Pollutant: PM<sub>10</sub>

Emission Limits: 0.0108 lb/MMBtu, 89.6 TPY<sup>(2)</sup>

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3

Pollutant: PM

Emission Limits: 0.0108 lb/MMBtu, 89.6 TPY<sup>(2)</sup>, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3  
567 IAC 23.3(2)"a"

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

Emission Limits: 0.060 lb/MMBtu/hr<sup>(3)</sup>, 500 ppm<sub>v</sub>

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3  
567 IAC 23.1(2)"aaaa"  
40 CFR 60 Subpart KKKK  
567 IAC 23.3(3)"e"

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

Emission Limits: 0.011 lb/MMBtu<sup>(4),(9)</sup>, 112.5 TPY, 15 ppm

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3  
567 IAC 23.1(2)"aaaa"  
40 CFR 60 Subpart KKKK

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 38.0 TPY<sup>(2), (5)</sup>

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3

Pollutant: Carbon Monoxide (CO)

Emission Limits: 0.012 lb/MMBtu<sup>(4),(9)</sup>, 97.2 TPY<sup>(4)</sup>, 337.04 TYP<sup>(6)</sup>, 2,900 lb/hr<sup>(7)</sup>, 2,100 lb/hr<sup>(8)</sup>

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3

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)

<sup>(1)</sup> Emission limit shall be interpreted as no visible emissions as determined by 40 CFR 60 Appendix A, Method 9.

<sup>(2)</sup> Emission limit includes all emissions, including startup, shutdown and malfunction.

<sup>(3)</sup> Per §60.4330(a)(2), you must not burn in the subject stationary combustion turbines any fuel which contains total potential sulfur emissions in excess of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input.

<sup>(4)</sup> Emission limit apply during steady state operations (not startup or shutdown).

<sup>(5)</sup> Emission limit applies to the combined emissions from GDMEC EP1 and GDMEC EP-2.

<sup>(6)</sup> Emission limit apply during startup and shutdown operations.

<sup>(7)</sup> Emission limit is in lbs/hr, on a one hour rolling average, for compliance with the NAAQS.

<sup>(8)</sup> Emission limit is in lbs/hr, on an eight hour rolling average, for compliance with the NAAQS.

<sup>(9)</sup> Emission limit is a 3-hour rolling average adjusted to 15% O<sub>2</sub>.

### **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. Per §60.4333, the facility must operate and maintain the stationary combustion turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including

during startup, shutdown, and malfunction.

- (1) The owner or operator shall keep a record of all inspections and maintenance and any actions resulting from the inspections and maintenance for all the process equipment for this process.
  - (2) The owner or operator shall maintain a record of catalyst replacement.
- B. The owner or operator shall only combust natural gas, in this turbine, with a sulfur content not exceeding 0.5 grains per 100 standard cubic feet.
  - (1) The facility shall maintain records of the total sulfur content of the natural gas, as specified in §60.4365. This shall include a current, valid purchase contract, tariff sheet, or transportation contract specifying the sulfur content of the natural gas.
- C. The owner or operator shall only operate these turbines in combined cycle mode.
- D. The owner or operator shall submit applicable notifications and applicable keep records as required by §60.7.
- E. The owner or operator shall follow the applicable monitoring requirements as required by §60.13.
- F. The owner or operator shall submit applicable reports as required by §60.4375.
- G. The total startup plus shutdown period shall not exceed 14 hours per unit per event, and shall follow good combustion practices. Startup is defined as the period beginning with turbine initial firing until the unit meets 70% of maximum baseload capacity. Shutdown is defined as the period beginning with the initiation of turbine shutdown sequence (once below 70% of maximum baseload capacity) and ending with the cessation of firing of the combustion turbine. Emissions from startup and shutdown events shall be counted towards the applicable annual emission limitations.
  - (1) The owner or operator shall keep a record of the date and time each unit was started up, when it reached 70% of maximum baseload capacity, when shutdown was initiated, and when the unit ceased firing. The number of hours per event the unit was operated in startup/shutdown mode shall then be calculated for each event.
- H. Per 567 IAC 33.3(18)“f”(1), prior to beginning actual construction of the project (Project Number 18-351) the owner or operator shall document and maintain a record of the following:
  - (1) A description of the project (Project Number 18-351),
  - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 18-351), and
  - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph “3” of the definition of “*projected actual emissions*” in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting

analysis if applicable.

- I. Per 567 IAC 33.3(18)“g”, the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)“f” available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).
- J. The owner or operator shall document the construction start and completion dates of the project (Project Number 18-351).
- K. The owner or operator shall calculate monthly VOC emissions for Unit 1 and Unit 2 Combustion Turbines (GDMEC EP-1 and GDMEC EP-2) by using the following formula:

VOC (tons/month) = {[ (VOC emission rate for Unit 1 during start up and shut down<sup>(1)(2)</sup> mode)\*(total hours of operation in start up and shut down mode for Unit 1 per month)] + [(VOC emission rate for Unit 2 during start up and shut down<sup>(1)(2)</sup> mode)\*(total hours of operation in start up and shut down mode for Unit 2 per month)] + [(VOC emission rate for Unit 1 during steady state<sup>(1)(2)</sup> mode)\*(total hours of operation in steady state mode for Unit 1 per month)] + [(VOC emission rate for Unit 2 during steady state<sup>(1)(2)</sup> mode)\*(total hours operation in steady state mode for Unit 2 per month)] } \* 1 ton/2000 lbs.

- (1) The owner or operator shall use the average pound per emission rate as determined by the most recent IDNR approved performance test. The permittee shall document the emission rate and retain a copy of the most recent stack test for the unit.
- (2) Start up and shut down mode shall be defined as in Condition G above. Steady state mode is all other times the turbines are operational.

- L. The or owner or operator shall maintain the following daily records for Unit 1 and Unit 2 Combustion Turbines:
  - (1) The total hours operation in start up or shut down mode for both turbines.
  - (2) The total hours operation in steady state mode for both turbines.
- M. The owner or operator shall maintain the following monthly records for Unit 1 and Unit 2 Combustion Turbines:
  - (1) The total hours operation in start up or shut down mode for both turbines.
  - (2) The total hours operation in steady state mode for both turbines.
  - (3) The amount of VOC emissions from both turbines using the equation in Condition K above, in tons.
  - (4) The 12-month rolling total of the amount of VOC emissions from both turbines, in tons.
- N. If the 12-month rolling total of VOC emissions from Unit 1 and Unit 2 Combustion Turbines exceeds 30.0 tons, the permittee shall immediately begin keeping the following

daily records:

- (1) The amount of VOC emissions from both turbines using the equation in Condition K above (insert daily for monthly values), in tons.
- (2) The 365-day rolling total of the amount of VOC emissions from both turbines, in tons.

Daily calculations of VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions drops below 30.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per this condition of this permit. If the emissions once again exceed 30.0 tons, daily recordkeeping will be required per this condition of this permit.

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3  
40 CFR 60 Subpart KKKK  
567 IAC 23.1(2)"aaaa"

### **Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 200

Stack Opening, (inches, dia.): 222

Exhaust Flow Rate (scfm): The exhaust flow will vary depending on operating load, ambient temperature, and the status of the evaporative cooler. These values will range from 569,400 scfm to 941,400 scfm.

Exhaust Temperature (°F): 202

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-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 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 – Nitrogen Oxides (NO<sub>x</sub>)

Stack Test to be Completed by (date) - Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.

Test Method – 40 CFR 60, Appendix A, Method 7E

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3  
40 CFR 60 Subpart KKKK  
567 IAC 23.1(2)"aaaa"

Pollutant – Volatile Organic Compounds (VOC)

Stack Test to be Completed by - Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.

Test Method - 40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18 or DNR approved method

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3

### **Continuous Emissions Monitoring:**

A. The following monitoring systems are required:

- (1) NO<sub>x</sub>: The owner or operator shall demonstrate compliance with the nitrogen oxide emission limits (both NSPS and non-NSPS) through the use of a continuous emission monitoring system (CEMS).
  - a. NSPS NO<sub>x</sub>, Emission Standards Monitoring Requirements:

The following requirements shall be followed to demonstrate compliance with the NSPS NO<sub>x</sub> emission standard in this permit. The owner or operator shall comply with the applicable monitoring requirements in 40 CFR Part 60, Subpart KKKK [§60.4300 - §60.4420], including those not specifically mentioned in this permit.

In accordance with 40 CFR §60.4340, the owner or operator shall install, certify, maintain, and operate a CEMS consisting of a NO<sub>x</sub> monitor and a diluent gas (oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>)) monitor, to determine the hourly NO<sub>x</sub> emission rate in parts per million (ppm) or pounds per million British thermal units (lb/MMBtu).

Each NO<sub>x</sub> diluent CEMS shall be installed and certified according to Performance Specification 2 (PS 2) in appendix B in Part 60, except the 7-day calibration drift is based on unit operating days, not calendar days. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a notice to the Department with the dates of the annual relative accuracy test audit. Alternatively, a NO<sub>x</sub> diluent CEMS that is installed and certified according to appendix A of part 75 of 40 CFR is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

As specified in §60.13(e)(2), during each full unit operating hour, both the NO<sub>x</sub> monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO<sub>x</sub> emission rate for the hour.

Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of 40 CFR are acceptable for use under this subpart.

The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. For the CEMS and fuel flow meters, the owner or operator may, satisfy the requirements of this paragraph by implementing the QA program and plan described in section 1 of appendix B to part 75 of 40 CFR.

For purposes of identifying excess emissions:

- All CEMS data must be reduced to hourly averages as specified in §60.13(h).
- For each unit operating hour in which a valid hourly average, as described in §60.4345(b), is obtained for both NO<sub>x</sub> and diluent monitors, the data acquisition and handling system must calculate and record the hourly NO<sub>x</sub> emission rate in units of ppm or lb/MMBtu, using the appropriate equation from method 19 in appendix A of Part 60. For any hour in which the hourly average O<sub>2</sub> concentration exceeds 19.0 percent O<sub>2</sub> (or the hourly average CO<sub>2</sub> concentration is less than 1.0 percent CO<sub>2</sub>), a diluent cap value of 19.0 percent O<sub>2</sub> or 1.0 percent CO<sub>2</sub> (as applicable) may be used in the emission calculations.
- Correction of measured NO<sub>x</sub> concentrations to 15 percent O<sub>2</sub> is not allowed.
- If you have installed and certified a NO<sub>x</sub> diluent CEMS to meet the requirements of part 75 of 40 CFR, states can approve that only quality assured data from the CEMS shall be used to identify excess emissions under this subpart. Periods where the missing data substitution procedures in subpart D of part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under §60.7(c).
- All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages.
- Calculate the hourly average NO<sub>x</sub> emission rates, in units of the emission standards under §60.4320, using ppm for units complying with the concentration limit.

- For combined cycle and combined heat and power units with heat recovery, use the calculated hourly average emission rates from paragraph (f) of this section to assess excess emissions on a 30 unit operating day rolling average basis, as described in §60.4380(b)(1).

For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

- An excess emissions the 30-day rolling average NO<sub>x</sub> emission rate exceeds the applicable emission limit in §60.4320. For the purposes of this subpart, a “30-day rolling average NO<sub>x</sub> emission rate” is the arithmetic average of all hourly NO<sub>x</sub> emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NO<sub>x</sub> emissions rates for the preceding 30 unit operating days if a valid NO<sub>x</sub> emission rate is obtained for at least 75 percent of all operating hours.
- A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO<sub>x</sub> concentration, CO<sub>2</sub> or O<sub>2</sub> concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if you will use this information for compliance purposes.
- For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

(b) Non-NSPS NO<sub>x</sub>, Emission Standards Monitoring Requirements:

The owner or operator shall demonstrate compliance with the NO<sub>x</sub> emission limits (lb/MMBtu and ton per year (tpy)) in Condition 1 of the permit through the use of this CEMS and a fuel flowmeter.

(2) CO:

The owner or operator shall install, certify, maintain, and operate a CEMS consisting of a CO monitor and a diluent gas (oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>)) monitor, to determine the hourly CO emission rate in parts per million (ppm) or pounds per million British thermal units (lb/MMBtu). The CEMS shall be installed, certified, evaluated, operated, and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 (PS4). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be



supplemented with a notice to the Department with the dates of the annual relative accuracy test audit.

(3) O<sub>2</sub> or CO<sub>2</sub>:

The owner or operator shall install, calibrate, maintain, and operate a CEMS and record the output of the system, for measuring the oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gases at each location where CO or NO<sub>x</sub> emissions are monitored. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 3 (PS3). If PS3 is equivalent to 40 CFR 75 Appendix A, then 40 CFR 75 Appendix A may be used in place of PS3.

(4) Fuel Flowmeter:

A fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of 40 CFR are acceptable.

B. The following data requirements shall apply to all CEMS for non-NSPS emission limits in this permit:

- (1) The owner or operator shall demonstrate compliance with the lb/MMBtu, lb/hr, and tpy NO<sub>x</sub> and CO emission limits in Condition 1 of the permit through the use of the CEMS and the fuel flowmeter.
- (2) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the unit are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.
- (3) 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.
- (4) For each full or partial operating hour, all valid data points shall be used to calculate an hourly average. At least two data points must be used to calculate each 1-hour average. Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages.
- (5) The 1-hour average NO<sub>x</sub>, and CO emission rates measured by the CEMS (in ppm) required by this permit shall be used to show compliance with the emission standards of this permit:
  - a. The NO<sub>x</sub> and CO pound per MMBtu emission rates shall be calculated using the following formula:

$$\text{Emission Rate } \left( \frac{\text{lb}}{\text{MMBtu}} \right) = C \times K \times \text{Fuel Factor} \times \frac{20.9}{(20.9 - O_2\%)}$$

C = concentration of pollutant measured in ppm from monitor

K = 1.194 x 10<sup>-7</sup> for NO<sub>x</sub>

$K = 7.623 \times 10^{-8}$  for CO  
Fuel Factor = See condition 5.a.i (SCF/MMBtu)

- i. The facility shall calculate the Fuel (F) factor according to equation 19-13 from 40 CFR 60 Appendix A Method 19. The facility shall obtain an ultimate and heat content analysis in order to calculate the F factor. The fuel analysis shall be completed as outlined in Section 12.3.2.3 and 12.3.2.4 of 40 CFR 60 Appendix A Method 19. Alternatively, the facility may use ASTM D 1945 for the ultimate analysis of the fuel. The owner/operator may elect to use analyses supplied by the fuel vendor if it is documented that these analyses are completed using the appropriate methods noted above.
  - ii. The site-specific F factor must be re-determined at least annually, and the value from the most recent determination must be used in the emission calculations. Alternatively, the previous F value or the default value listed in Method 19 may continue to be used if it is higher than the value obtained in the most recent determination. The owner or operator shall keep records of all site-specific F determinations, active for at least 3 years. (Calculate all F- at standard conditions of 20 °C (68 °F) and 29.92 inches of mercury).
- b. The NO<sub>x</sub> and CO pound per hour emission rates shall be determined using the following equation:

$$\text{Emission Rate } \left( \frac{\text{lb}}{\text{hr}} \right) = \text{lb/MMBtu} \times \text{MMBtu/hr}$$

- o The facility shall determine a site specific heat input rate (MMBtu/hr). This rate shall be calculated by multiplying the fuel flow rate (scf/hr), obtained from the fuel flowmeter, and the fuel heat content (MMBtu/scf), obtained from the supplier's daily GCV report.
- c. The NO<sub>x</sub> and CO ton per year emission rates shall be determined by summing the hourly mass emission rates and calculating 12 month rolling totals.
- (6) For each hour of missing emission data (NO<sub>x</sub> and CO), the owner or operator shall substitute data by:
- (a) 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:
    - i. 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.
    - ii. 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.
- (b) 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:
- i. 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.
  - ii. 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.
- (c) 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.
- (7) The facility shall keep records of the emission rates on-site for a minimum of two (2) years and shall be available for inspection by the Department. The facility shall report any exceedances per sections 11 and 12 of the permit.

C. If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

Authority for Requirement: DNR Construction Permits 02-A-048-P3 & 02-A-049-P3  
40 CFR 60 Subpart KKKK  
567 IAC 23.1(2)"aaaa"

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

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

### Associated Equipment

Emission Unit vented through this Emission Point: GDMEC-EU 3

Emission Unit Description: Nebraska Auxiliary Boiler

Raw Material/Fuel: Natural Gas

Rated Capacity: 43.30 MM BTU/hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: 0%<sup>(1)</sup>

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2

<sup>(1)</sup> This limit shall be interpreted as no visible emissions as determined by 40 CFR 60 Appendix A, Method 9

Pollutant: PM<sub>10</sub>

Emission Limits: 0.0076 lb/MMBtu, 1.44 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2

Pollutant: PM

Emission Limits: 0.0076 lb/MMBtu, 1.44 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2

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

Emission Limits: 0.27 TPY, 500ppm<sub>v</sub>

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2  
567 IAC 23.3(3)"e"

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

Emission Limits: 0.050 lb/MMBtu, 9.48 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limits: 0.0055 lb/MMBtu, 1.04 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2

Pollutant: Carbon Monoxide (CO)

Emission Limits: 0.084 lb/MMBtu, 15.93 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2

### **Operational Limits & Requirements**

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

- 1) This unit shall be fired with natural gas only.
- 2) The natural gas combusted shall have a maximum sulfur content of 0.5 gr/100 cf (pipeline quality natural gas).

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2

### **NSPS and NESHAP Applicability**

This unit is subject to regulation outlined in 40 CFR 60 Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* (567 IAC 23.1(2)“III”).

NSPS Requirements:

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. 40 CFR 60.7(b)

The permittee shall submit an excess emissions and monitoring systems performance report to the Department and Administrator in accordance with 40 CFR 60.7(c). The summary report form shall contain the information and format required in 40 CFR 60.7(d).

Notwithstanding the frequency of reporting requirements in the prior permit conditions, the permittee may reduce the frequency of reporting of excess emissions and monitoring system performance reports pursuant to 40 CFR 60.7(e).

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

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

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2  
567 IAC 23.1(2)  
Polk County Board of Health Rules and Regulations: Chapter V,  
Article VI, Section 5-16 (14)

**Reporting & Record keeping:**

**Record keeping:**

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

- 1) A fuel analysis shall be kept on file for each fuel used in this unit. The analyses performed on the natural gas for the combustion turbines (as required by 40 CFR 60.334(b)) shall be sufficient to satisfy this requirement. This analysis shall be performed at least semi-annually.

Authority for Requirement: DNR Construction Permit Number: 02-A-050-P2

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 130

Stack Opening, (inches, dia.): 30

Exhaust Flow Rate (scfm): 8,790

Exhaust Temperature (°F): 303

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 02-A-050-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 30 days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

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## **Emission Point ID Number: GDMEC-EP 6**

### Associated Equipment

Emission Unit vented through this Emission Point: GDMEC-EU 6  
Emission Unit Description: Caterpillar Emergency Generator, 700 kW  
Raw Material/Fuel: Diesel Fuel  
Rated Capacity: 49.7 gal/hr or 6.76 MM BTU/ hr.

### **Applicable Requirements**

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

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

Pollutant: Opacity  
Emission Limit: 20%  
Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2

Pollutant: PM<sub>10</sub>  
Emission Limits: 0.95 lb/hr, 0.24 TPY  
Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2

Pollutant: PM  
Emission Limits: 0.95 lb/hr, 0.24 TPY  
Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limits: 0.35 lb/hr, 0.09 TPY, 2.5 lb/MMBtu  
Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2  
567 IAC 23.(3)"b"(2)

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)  
Emission Limits: 22.69 lb/hr, 5.7 TPY  
Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limits: 0.27 lb/hr, 0.07 TPY  
Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2

Pollutant: Carbon Monoxide (CO)  
Emission Limits: 2.86 lb/hr, 0.72 TPY  
Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2



### **Operational Limits & Requirements**

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

- 1) This unit shall burn diesel fuel only.
- 2) The sulfur content of the fuel used in this unit shall not exceed a maximum of 0.05% wt.
- 3) The fuel consumption of this unit shall not exceed 24,850 gallons in any twelve (12) month period, rolled monthly.
- 4) The use of this unit shall be limited to periods of testing/exercising of the engine and periods of emergency use. The testing/exercising of the engine shall be limited to the time recommended by the manufacturer of the engine.

Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2

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

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

- 1) A fuel certification shall be kept for each fuel delivery received for this unit. This certification shall show the type of fuel delivered along with the sulfur content of the fuel.
- 2) For each use of this unit, a log entry shall be made noting the start time of the usage, the duration of the usage, the amount of fuel used, and the reason for the usage.
- 3) At the end of each month, the fuel usage over the previous month shall be recorded. Additionally, the fuel usage over the previous twelve (12) months shall be recorded at the end of each month.
- 4) A copy of the manufacturer's documentation for the unit shall be maintained on site for review. This documentation shall specifically cover the recommendation for testing/exercising of the unit.

Authority for Requirement: DNR Construction Permit Number: 02-A-054-P2

### **NESHAP:**

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)(1)(iii) this compression ignition emergency engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

### **Compliance Date**

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

Operation and Maintenance Requirements 40 CFR 63.6603, 63.6625, 63.6640 and Tables 2d and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or 1 year + 30 days, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing and emergency demand response.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2d to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5)
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2d. (See Footnote 2 of Table 2d for more information.)

Authority for Requirement: 40 CFR 63 Subpart ZZZZ  
567 IAC 23.1(4)"cz"  
Polk County Board of Health Rules and Regulations: Chapter V,  
Article VIII, Section 5-20

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 10.3

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): 2,000

Exhaust Temperature (°F): 1,024

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit Number: 02-A-054-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 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.*

*Periodic Monitoring is not required at this time. Periodic Monitoring will be required if the equipment is operated more than 876 hours per 12-month period, rolled monthly.*

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

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## **Emission Point ID Number: GDMEC-EP 7**

### Associated Equipment

Emission Unit vented through this Emission Point: GDMEC-EU 7

Emission Unit Description: Dew Point Heater

Raw Material/Fuel: Natural Gas

Rated Capacity: 7.16 MM BTU/ hr.

### **Applicable Requirements**

Pollutant: Opacity

Emission Limit: 0%<sup>(1)</sup>

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2

<sup>(1)</sup> This limit shall be interpreted as no visible emissions as determined by 40 CFR 60 Appendix A, Method 9

Pollutant: PM<sub>10</sub>

Emission Limits: 0.0045 lb/MMBtu, 0.141 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2

Pollutant: PM

Emission Limits: 0.0045 lb/MMBtu, 0.141 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2

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

Emission Limits: 0.04 TPY, 500ppm<sub>v</sub>

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2  
567 IAC 23.3(3)"e"

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

Emission Limits: 0.036 lb/MMBtu, 1.13 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limits: 0.006 lb/MMBtu, 0.19 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2

Pollutant: Carbon Monoxide (CO)

Emission Limits: 0.036 lb/MMBtu, 1.13 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2

### **Operational Limits & Requirements**

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

- 1) This unit shall be fired with natural gas only.
- 2) The natural gas combusted shall have a maximum sulfur content of 0.5 gr/100 cf (pipeline quality natural gas).

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2

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

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

- 1) A fuel analysis shall be kept on file for each fuel used in this unit. The analyses performed on the natural gas for the combustion turbines (as required by 40 CFR 60.334(b)) shall be sufficient to satisfy this requirement. This analysis shall be performed at least semi-annually.

Authority for Requirement: DNR Construction Permit Number: 02-A-051-P2

### **Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 40

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 1,762

Exhaust Temperature (°F): 550

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 02-A-051-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 30 days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

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## **Emission Point ID Number: GDMEC-EP 20**

### Associated Equipment

Emission Unit vented through this Emission Point: GDMEC- EU 20

Emission Unit Description: Diesel Fired Fire Pump (265 bhp)

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 14.2 gal/hr or 1.93 MMBTU/ hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2

Pollutant: PM<sub>10</sub>

Emission Limits: 0.62 lb/hr, 0.14 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2

Pollutant: PM

Emission Limits: 0.62 lb/hr, 0.14 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2

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

Emission Limits: 0.02 TPY, 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2  
567 IAC 23.3(3)"b"(2)

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

Emission Limits: 3.91 lb/hr, 0.85 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limits: 0.12 lb/hr, 0.03 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2

Pollutant: Carbon Monoxide (CO)

Emission Limits: 2.21 lb/hr, 0.48 TPY

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2

### **Operational Limits & Requirements**

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

- 1) This unit shall burn diesel fuel only.
- 2) The sulfur content of the fuel used in this unit shall not exceed a maximum of 0.05% wt.
- 3) The fuel consumption of this unit shall not exceed 6,200 gallons in any twelve (12) month period, rolled monthly.
- 4) The use of this unit shall be limited to periods of testing/ exercising of the engine and periods of emergency use. The testing/exercising of the engine shall be limited to the time recommended by the manufacturer of the engine.

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2

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

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

- 1) A fuel certification shall be kept for each fuel delivery received for this unit. This certification shall show the type of fuel delivered along with the sulfur content of the fuel.
- 2) For each use of this unit, a log entry shall be made noting the start time of the usage, the duration of the usage, the amount of fuel used, and the reason for the usage.
- 3) At the end of each month, the fuel usage over the previous month shall be recorded. Additionally, the fuel usage over the previous twelve (12) months shall be recorded at the end of each month.
- 4) A copy of the manufacturer's documentation for the unit shall be maintained on site for review. This documentation shall specifically cover the recommendation for testing/exercising of the unit.

Authority for Requirement: DNR Construction Permit Number: 02-A-055-P2

### **NESHAP:**

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)(1)(iii) this compression ignition emergency engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

### **Compliance Date**

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.



Operation and Maintenance Requirements 40 CFR 63.6603, 63.6625, 63.6640 and Tables 2d and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or 1 year + 30 days, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing and emergency demand response.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2d to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5)
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2d. (See Footnote 2 of Table 2d for more information.)

Authority for Requirement: 40 CFR 63 Subpart ZZZZ  
567 IAC 23.1(4)"cz"  
Polk County Board of Health Rules and Regulations: Chapter V,  
Article VIII, Section 5-20

**Emission Point Characteristics**

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

Stack Height, (ft., from the ground): 13.9  
Stack Opening, (inches, dia.): 5  
Exhaust Flow Rate (scfm): 420  
Exhaust Temperature (°F): 840  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: DNR Construction Permit 02-A-055-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 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.*

*Periodic Monitoring is not required at this time. Periodic Monitoring will be required if the equipment is operated more than 876 hours per 12-month period, rolled monthly.*

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

## IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code (IAC). When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix B.

### G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 24.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 24.105(2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 24.108(1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 24.108(14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 24.108(9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 24.108(15)"c"*

### G2. Permit Expiration

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

### **G3. Certification Requirement for Title V Related Documents**

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 24.107(4)

### **G4. Annual Compliance Certification**

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and Polk County Air Quality Division. 567 IAC 24.108(15)"e"

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

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 24.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate Polk County Air Quality Division. 567 IAC 24.108 (5)

### **G6. Annual Fee**

1. The permittee is required under subrule 567 IAC 24.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1,

forms from the previous year may be used and the year of emissions documented changed.

The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.

6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 24.115(1)"d".

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

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

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 24.108 (15)"b" and Chapter V, Article II, 5-3 and 5-4*

#### **G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 24.108 (9)"e" and Chapter V, Article X, 5-46 and 5-47*

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

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

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 21.8(1) and Chapter V, Article VI, Section 5-17.1*

#### **G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
  - a. The date, place and time of sampling or measurements
  - b. The date the analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses; and
  - f. The operating conditions as existing at the time of sampling or measurement.
  - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
  - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
  - b. Maintain a log at the permitted facility of the scenario under which it is operating.
  - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 24.108(4), 567 IAC 24.108(12)*

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

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

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
  - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 24;
  - b. Compliance test methods specified in 567 Chapter 21; or
  - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a. Any monitoring or testing methods provided in these rules; or
  - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

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

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 24.108(6)*

## **G13. Hazardous Release**

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

## **G14. Excess Emissions and Excess Emissions Reporting Requirements**

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

## 2. Excess Emissions Reporting

- a. **Initial Reporting of Excess Emissions.** An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
  - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and expected duration of the excess emission.
  - iv. The cause of the excess emission.
  - v. The steps being taken to remedy the excess emission.
  - vi. The steps being taken to limit the excess emission in the interim period.
- b. **Written Reporting of Excess Emissions.** A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
  - i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and duration of the excess emission.
  - iv. The cause of the excess emission.
  - v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
  - vi. The steps that were taken to limit the excess emission.
  - vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 21.7(1)-567 IAC 21.7(4) and Chapter V, Article VI, 5-17*

### **G15. Permit Deviation Reporting Requirements**

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 24.108(5)"b"*



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

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

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

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 24.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—24.140(455B) through 567 - 24.144(455B));
  - e. The changes comply with all applicable requirements.
  - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

- vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 24.110(1)*
- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 24.110(2)*
- 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 24.110(1). *567 IAC 24.110(3)*
- 4. The permit shield provided in subrule 24.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 24.110(4)*
- 5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 24.108(11)*

#### **G18. Duty to Modify a Title V Permit**

- 1. Administrative Amendment.
  - a. An administrative permit amendment is a permit revision that does any of the following:
    - i. Correct typographical errors
    - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
    - iii. Require more frequent monitoring or reporting by the permittee; or
    - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
  - b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
  - c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.
- 2. Minor Title V Permit Modification.
  - a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
    - i. Do not violate any applicable requirement;
    - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
    - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;

- iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
  - v. Are not modifications under any provision of Title I of the Act; and
  - vi. Are not required to be processed as significant modification under rule 567 - 24.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - ii. The permittee's suggested draft permit;
  - iii. Certification by a responsible official, pursuant to 567 IAC 24.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
  - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 24.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 24.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

### 3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 24, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 24.111-567 IAC 24.113*

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

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. *567 IAC 22.1(1) and Chapter V, Article X, 5-28*

### **G20. Asbestos**

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

### **G21. Open Burning**

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

### **G22. Acid Rain (Title IV) Emissions Allowances**

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 24.108(7)*

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

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
  4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
  5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

## **G24. Permit Reopenings**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 24.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the

- original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
- c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 24.108(17)"a", 567 IAC 24.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
- a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
  - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
  - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 24.114(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 24.114(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 24.114(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 24.108 (18)*

#### **G26. Severability**

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 24.108 (8) and Chapter V, Article XVII, 5-77*

#### **G27. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 24.108 (9)"d"*

#### **G28. Transferability**

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of *567 IAC 24.111(1)*. *567 IAC 24.111 (1)"d"*

#### **G29. Disclaimer**

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 24.3(3)"c"*

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

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results

of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks (42 days) of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
6200 Park Ave  
Suite 200  
Des Moines, IA 50321  
(515) 343-6589

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

*567 IAC 21.10(7)"a", 567 IAC 21.10(9) and Chapter V, Article VII, 5-18 and 5-19*

### **G31. Prevention of Air Pollution Emergency Episodes**

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

*567 IAC 26.1(1)*

### **G32. Contacts List**

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

Iowa Compliance Officer  
Air Branch  
Enforcement and Compliance Assurance Division  
U.S. EPA Region 7  
11201 Renner Blvd.  
Lenexa, KS 66219  
(913) 551-7020



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

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
6200 Park Ave  
Suite 200  
Des Moines, IA 50321  
(515) 313-8325

Reports or notifications to the local program shall be directed to the supervisor at the appropriate local program. Current address and phone number is:

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

## **V. Appendix I: CSAPR (Cross-State Air Pollution Rule) and Acid Rain Phase II Permits**

### **i) CSAPR (Cross-State Air Pollution Rule)**

Issued to: Pleasant Hill Energy- Units 1,2, and 3 (EU 001, EU 002, EU 005)

Operated by: MidAmerican Energy Company

ORIS code: 7145

Effective: Five Years

### **ii) CSAPR (Cross-State Air Pollution Rule)**

Issued to: The Greater Des Moines Energy Center- (GDMEC EU 1 and GDMEC EU 2)

Operated by: MidAmerican Energy Company

ORIS code: 7985

Effective: Five Years

### **iii) Phase II Acid Rain Permit**

Issued to: Pleasant Hill Energy- Unit 3 (EU 005)

Operated by: MidAmerican Energy Company

ORIS code: 7145

Effective: Five Years

### **iv) Phase II Acid Rain Permit**

Issued to: The Greater Des Moines Energy Center- (GDMEC EU 1 and GDMEC EU 2)

Operated by: MidAmerican Energy Company

ORIS code: 7985

Effective: Five Years

## i) CSAPR (Cross-State Air Pollution Rule)

Issued to: Pleasant Hill Energy- Units 1,2, and 3 (EU 001, EU 002, EU 005)

Operated by: MidAmerican Energy Company

ORIS code: 7145

Effective: Five Years

### Transport Rule (TR) Trading Program Title V Requirements

#### Description of TR Monitoring Provisions

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

Unit ID: 1 (ORIS Code: 7145)					
MidAmerican Energy - Pleasant Hill Energy Center					
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 <sub>2</sub>			-----	X	
NO <sub>x</sub>		-----		X	
Heat input			-----	X	

Unit ID: 2 (ORIS Code: 7145)

MidAmerican Energy - Pleasant Hill Energy Center

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 <sub>2</sub>			-----	X	
NO <sub>x</sub>		-----		X	
Heat input			-----	X	

Unit ID: 3 (ORIS Code: 7145)

MidAmerican Energy - Pleasant Hill Energy Center

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	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

	(for NO <sub>x</sub> monitoring)				
SO <sub>2</sub>		X	-----		
NO <sub>x</sub>		-----			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 <https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources#monMethod>.

3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NO<sub>x</sub> Annual Trading Program), 97.835 (TR NO<sub>x</sub> Ozone Season Group 2 Trading Program) and/or 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <http://www.epa.gov/airmarkets/part-75-petition-responses>.

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 <http://www.epa.gov/airmarkets/part-75-petition-responses>.

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 AAAAAA 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 AAAAAA 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 AAAAAA 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 AAAAAA.
- (6) Limited authorization. A TR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR NO<sub>x</sub> Annual Trading Program; and



- (ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NO<sub>x</sub> Annual allowance does not constitute a property right.

**(d) Title V permit revision requirements.**

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

**(e) Additional recordkeeping and reporting requirements.**

- (1) Unless otherwise provided, the owners and operators of each TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO<sub>x</sub> Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
  - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>x</sub> Annual Trading Program.
- (2) The designated representative of a TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source shall make all submissions required under the TR NO<sub>x</sub> Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

**(f) Liability.**

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

**(g) Effect on other authorities.**

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

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

**(a) Designated representative requirements.**

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

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

- (1) The owners and operators, and the designated representative, of each TR NO<sub>x</sub> Ozone Season Group 2 source and each TR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of TR NO<sub>x</sub> Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the TR NO<sub>x</sub> Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

**(c) NO<sub>x</sub> emissions requirements.**

- (1) TR NO<sub>x</sub> Ozone Season Group 2 emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>x</sub> Ozone Season Group 2 source and each TR

NO<sub>x</sub> Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, TR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from all TR NO<sub>x</sub> Ozone Season Group 2 units at the source.

- (ii). If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Ozone Season Group 2 units at a TR NO<sub>x</sub> Ozone Season Group 2 source are in excess of the TR NO<sub>x</sub> 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 NO<sub>x</sub> 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 NO<sub>x</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and
  - (B). The amount by which total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season Group 2 units at TR NO<sub>x</sub> Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.

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

control period in a given year must be a TR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

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

**(d) Title V permit revision requirements.**

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR 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).

**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.

**(e) 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.

**(f) 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.

## ii) CSAPR (Cross-State Air Pollution Rule)

Issued to: The Greater Des Moines Energy Center- (GDMEC EU1 and GDMEC EU 2)

Operated by: MidAmerican Energy Company

ORIS code: 7985

Effective: Five Years

### Transport Rule (TR) Trading Program Title V Requirements

#### Description of TR Monitoring Provisions

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

Unit ID: 1 (ORIS Code: 7985) MidAmerican Energy - Greater Des Moines Energy Center					
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 <sub>2</sub>		X	-----		
NO <sub>x</sub>	X	-----			
Heat input		X	-----		

Unit ID: 2 (ORIS Code: 7985) MidAmerican Energy - Greater Des Moines Energy Center					
Parameter	Continuous emission monitoring system or systems	Excepted monitoring system requirements for gas- and oil-	Excepted monitoring system requirements for gas- and oil-	Low Mass Emissions excepted monitoring (LME) requirements for	EPA-approved alternative monitoring system requirements pursuant to 40

	(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)	fired units pursuant to 40 CFR part 75, appendix D	fired peaking units pursuant to 40 CFR part 75, appendix E	gas- and oil-fired units pursuant to 40 CFR 75.19	CFR part 75, subpart E
SO <sub>2</sub>		X	-----		
NO <sub>x</sub>	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 <https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources#monMethod>.

3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NO<sub>x</sub> Annual Trading Program), 97.835 (TR NO<sub>x</sub> Ozone Season Group 2 Trading Program) and/or 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <http://www.epa.gov/airmarkets/part-75-petition-responses>.

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 <http://www.epa.gov/airmarkets/part-75-petition-responses>.

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)**

##### **(h) 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.

##### **(i) Emissions monitoring, reporting, and recordkeeping requirements.**

- (3) 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).
- (4) 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.

##### **(j) NO<sub>x</sub> emissions requirements.**

- (8) 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.
- (9) 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.
  - (10) 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.
  - (11) 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)(i)(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.
  - (12) 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.
  - (13) 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.
  - (14) Property right. A TR NO<sub>x</sub> Annual allowance does not constitute a property right.
- (k) 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).

**(l) Additional recordkeeping and reporting requirements.**

- (3) Unless otherwise provided, the owners and operators of each TR NO<sub>x</sub> Annual source and each TR NO<sub>x</sub> Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO<sub>x</sub> Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
  - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>x</sub> Annual Trading Program.
- (4) 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.

**(m) 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.

**(n) 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)**

**(h) 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.

**(i) Emissions monitoring, reporting, and recordkeeping requirements.**

- (3) The owners and operators, and the designated representative, of each TR NO<sub>x</sub> Ozone Season Group 2 source and each TR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (4) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of TR NO<sub>x</sub> Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the TR NO<sub>x</sub> Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

**(j) NO<sub>x</sub> emissions requirements.**

- (8) 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 NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Ozone Season Group 2 units at a TR NO<sub>x</sub> Ozone Season Group 2 source are in excess of the TR NO<sub>x</sub> 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 NO<sub>x</sub> 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.
- (9) TR NO<sub>x</sub> Ozone Season Group 2 assurance provisions.
- (i). If total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Ozone Season Group 2 units at TR NO<sub>x</sub> Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>x</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.825(b), of multiplying—
    - (A). The quotient of the amount by which the common designated representative's share of such NO<sub>x</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and
    - (B). The amount by which total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season Group 2 units at TR NO<sub>x</sub> Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
  - (ii). The owners and operators shall hold the TR 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 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 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> Ozone Season Group 2 trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).
  - (iv). It shall not be a violation of 40 CFR part 97, subpart EEEEE or of the Clean Air Act if total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Ozone Season Group 2 units at TR NO<sub>x</sub> Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>x</sub>

- emissions from the TR NO<sub>x</sub> Ozone Season Group 2 units at TR NO<sub>x</sub> Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR NO<sub>x</sub> Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
    - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
    - (B). Each TR NO<sub>x</sub> Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.
  - (10) Compliance periods.
    - (i). A TR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
    - (ii). A TR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
  - (11) 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.
  - (12) 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.
  - (13) 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.

- (14) Property right. A TR NO<sub>x</sub> Ozone Season Group 2 allowance does not constitute a property right.

**(k) Title V permit revision requirements.**

- (3) 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.
- (4) 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).

**(l) Additional recordkeeping and reporting requirements.**

- (3) 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.
- (4) 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.

**(m) Liability.**

- (3) 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.

- (4) 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.

**(n) 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)**

**(g) 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.

**(h) Emissions monitoring, reporting, and recordkeeping requirements.**

- (3) 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).
- (4) 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.

**(i) SO<sub>2</sub> emissions requirements.**

**(8) 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.
- (9) 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.
- (10) 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.
- (11) 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.
- (12) 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.
- (13) 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.

- (14) Property right. A TR SO<sub>2</sub> Group 1 allowance does not constitute a property right.

**(j) Title V permit revision requirements.**

- (3) 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.
- (4) 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).

**Additional recordkeeping and reporting requirements.**

- (3) 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.
- (4) 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.

**(k) Liability.**

- (3) 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.



(4) 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.

**(l) 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.



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## Draft Phase II Acid Rain Permit

Issued to: Pleasant Hill Energy  
Operated by: MidAmerican Energy Company  
ORIS code: 7145  
Effective: Five Years from issuance

For the Director of the Department of Natural Resources

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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.
- 4) The permit application submitted for this source, as corrected by the Iowa Department of Natural Resources (DNR), 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.

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### 1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with Iowa Code paragraph 455B.133[8"a"], 455B.134[3], and Titles IV and V of the Clean Air Act, the Director of the Iowa Department of Natural Resources (DNR), Air Quality Bureau, Operating Permit Section issues this permit pursuant to 567 Iowa Administrative Code (IAC) 24.135(455B) to 24.145(455B) and 567 IAC 24.100(455B) to 24.116(455B). The compliance options are approved as proposed in the attached application.

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

		2025	2026	2027	2028	2029	2030
<b>Unit 3</b>	SO <sub>2</sub> allowances, under Tables 2 of 40 CFR part 73.	0*	0*	0*	0*	0*	0*

\* 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> permit.

Note: The Pleasant Hill Energy Center (ORIS Code 7145) and the Greater Des Moines Energy Center (ORIS Code 7985) are considered one source under the Title V permitting program. A Phase II permit has been issued to each facility to avoid confusion as they each have a unique ORIS Code.

## 4) Permit Application: Attached.

## Acid Rain Permit Application

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

This submission is: ☐ new ☐ revised ☒ for ARP permit renewal

## STEP 1

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

Facility (Source) Name	Pleasant Hill Energy Center	State	Iowa	Plant Code	7145
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## STEP 2

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

[illegible]

Facility (Source) Name (from STEP 1)	Pleasant Hill Energy Center
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**STEP 3****Permit Requirements****Read the standard requirements.**

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

**Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the 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 source shall:
  - (i) 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:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**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.

Facility (Source) Name (from STEP 1)	Pleasant Hill Energy Center
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**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 part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

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

**Liability**

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

Facility (Source) Name (from STEP 1)	Pleasant Hill Energy Center
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**STEP 3, Cont'd.****Effect on Other Authorities**

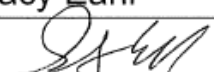
No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (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 <b>Stacy Earll</b>	
Signature 	Date <b>5-7-25</b>





## Instructions for the Acid Rain Program Permit Application

*The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the Title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the Title V permitting authority either issues a permit to the source or disapproves the application.*

Please type or print. If assistance is needed, contact the Title V permitting authority.

**STEP 1** A Plant Code is a 4- or 5-digit number assigned by the Department of Energy's (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, send an email to the EIA. The email address is [EIA-860@eia.gov](mailto:EIA-860@eia.gov).

**STEP 2** In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

### Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the Title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a Title V permit, or such longer time as provided for under the Title V permitting authority's operating permits regulation.

### Submission Instructions

Submit this form to the appropriate Title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Clean Air Markets Hotline at (202) 343-9620.

### Paperwork Burden Estimate

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2060-0258). Responses to this collection of information are mandatory (40 CFR 72.30 and 72.31). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information is estimated to be 8 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.





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## Draft Phase II Acid Rain Permit

Issued to: The Greater Des Moines Energy Center  
Operated by: MidAmerican Energy Company  
ORIS code: 7985  
Effective: Five Years from issuance

**For the Director of the Department of Natural Resources**

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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.
- 4) The permit application submitted for this source, as corrected by the Iowa Department of Natural Resources (DNR), 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"], 455B.134[3], and Titles IV and V of the Clean Air Act, the Director of the Iowa Department of Natural Resources (DNR), Air Quality Bureau, Operating Permit Section issues this permit pursuant to 567 Iowa Administrative Code (IAC) 24.135(455B) to 24.145(455B) and 567 IAC 24.100(455B) to 24.116(455B). The compliance options are approved as proposed in the attached application.

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

		2025	2026	2027	2028	2029	2030
<b>Unit 1</b>	SO <sub>2</sub> allowances, under Tables 2 of 40 CFR part 73.	0*	0*	0*	0*	0*	0*

		2025	2026	2027	2028	2029	2030
<b>Unit 2</b>	SO <sub>2</sub> allowances, under Tables 2 of 40 CFR part 73.	0*	0*	0*	0*	0*	0*

\* 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> permit.

Note: The Greater Des Moines Energy Center (ORIS Code 7985) and the Pleasant Hill Energy Center (ORIS Code 7145) are considered one source under the Title V permitting program. A Phase II permit has been issued to each facility to avoid confusion as they each have a unique ORIS Code.

## 4) Permit Application: Attached.

# Acid Rain Permit Application

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

submission is: ☐ new ☐ revised ☒ for ARP permit renewal

### STEP 1

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

Facility (Source) Name	Greater Des Moines Energy Center	State	Iowa	Plant Code	7985
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## STEP 2

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

[illegible]

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

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the 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 source shall:
  - (i) 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:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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.

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

Recordkeeping and Reporting Requirements

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

Liability

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

Greater Des Moines Energy Center  
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.

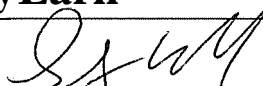
**Certification**

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

penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

**STEP4**

**Read the  
certification  
statement, sign,  
and date.**

Name	<b>StacyEarll</b>	
Signature		Date
		f- 7-2;-

EPA Form 7610-16 (Revised 07-2022)



## Instructions for the Acid Rain Program Permit Application

*The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the Title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the Title V permitting authority either issues a permit to the source or disapproves the application.*

Please type or print. If assistance is needed, contact the Title V permitting authority.

**STEP 1** A Plant Code is a 4- or 5-digit number assigned by the Department of Energy's (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, send an email to the EIA. The email address is [EIA-860@eia.gov](mailto:EIA-860@eia.gov).

**STEP 2** In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

### Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the Title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a Title V permit, or such longer time as provided for under the Title V permitting authority's operating permits regulation.

### Submission Instructions

Submit this form to the appropriate Title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Clean Air Markets Hotline at (202) 343-9620.

### Paperwork Burden Estimate

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2060-0258). Responses to this collection of information are mandatory (40 CFR 72.30 and 72.31). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information is estimated to be 8 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

## **VI. Appendix II: Executive Order 10 (EO10) Rules Crosswalk**



Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	20 (Reserved)	Scope of Title - Definitions	N/A	Definitions moved to Ch. 21, 22 and 23. <b>Rescinded</b> Ch. 20. (Reserved)
21	21	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	<b>Kept and combined</b> with rules from Chapters 24, 25, 26, and 29.
22	22	Controlling Pollution-Permits	Controlling Air Pollution - Construction Permitting	<b>Kept construction permit rules and combined</b> with Ch. 20 (definitions) and Ch. 28 (NAAQS). <b>Moved operating permit rules</b> to Chapter 24.
22.100 - 22.300(12)	(New) 24	N/A	Operating Permits	<b>Moved operating permit rules</b> from Ch. 22 to Ch. 24.
23	23	Emission Standards	Air Emission Standards	<b>Kept</b>
24	(New) 21	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	<b>Moved rules and combined</b> with Ch. 21. <b>Moved TV rules here</b> (to Ch. 24).
25	(New) 21	Emissions Measurement	Compliance, Excess Emissions, and Measurement of Emissions	<b>Moved rules and combined</b> with Ch. 21. <b>Rescinded</b> Ch. 25. (Reserved)
26	(New) 21	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	<b>Moved rules and combined</b> with Ch. 21. <b>Rescinded</b> Ch. 26. (Reserved)
27	27	Local Program Acceptance	Local Program Acceptance	<b>Kept</b>
28	22	NAAQS	N/A	<b>Moved rules and combined</b> with Ch. 22. <b>Rescinded</b> Ch. 28. (Reserved)
29	(New) 21	Opacity Qualifications	Compliance, Excess Emissions, and Measurement of Emissions	<b>Moved rules and combined</b> with Ch. 21. <b>Rescinded</b> Ch. 29. (Reserved)
30	30	Fees	Fee	<b>Kept</b>
31	31	Nonattainment Areas	Nonattainment New Source Review	<b>Kept</b>
32	N/A	AFO Field Study	N/A	<b>Rescinded</b> Ch. 32. (Reserved)
33	33	Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality	Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)	<b>Kept</b>
34	N/A	Emissions Trading-CAIR-CAMR	N/A	<b>Rescinded</b> Ch. 34. (Reserved)
35	N/A	Grant Assistance Programs	N/A	<b>Rescinded</b> Ch. 35. (Reserved)

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
<b>20</b>	<b>20 (Reserved)</b>	<b>Scope of Title - Definitions</b>	<b>N/A</b>	<b>Definitions moved to Ch. 21, 22 and 23.</b> <b>Rescinded Ch. 20. (Reserved)</b>
20.1	N/A	Scope of title	N/A	
20.2	Ch. 21, 22, 23	Definitions	Definitions	See beginning of Ch. 21, 22, and 23
20.3	N/A	Air quality forms generally	N/A	
<b>21</b>	<b>21</b>	<b>Compliance</b>	<b>Compliance, Excess Emissions, and Measurement of Emissions</b>	<b>Kept and combined with rules from Chapters 24, 25, 26, and 29.</b>
21.1	21.1	Compliance Schedule	Definitions and compliance requirements	Added definitions from Ch. 21, some language updated
21.2	21.2	Variances	Variances	Some language updated
21.3	21.3	Emission reduction program	Reserved	Reserved
21.4	21.4	Circumvention of rules	Circumvention of rules	Minor language updated
21.5	21.5	Evidence used in establishing that a violation has or is occurring	Evidence used in establishing that a violation has occurred or is occurring	21.5(2) Reserved, some language updated
21.6	21.6	Temporary electricity generation for disaster situations	Temporary electricity generation for disaster situations	Minor language updated
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
N/A	21.9	N/A	Compliance with other requirements	New language
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3	N/A	Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
<b>22</b>	<b>22</b>	<b>Controlling Pollution-Permits</b>	<b>Controlling Air Pollution - Construction Permitting</b>	<b>Kept construction permit rules and combined with Ch. 20 (definitions) and Ch. 28 (NAAQS).</b> <b>Moved operating permit rules to Chapter 24.</b>
22.1	22.1	Permits required for new or existing stationary sources	Definitions and permit requirements for new or existing stationary sources	Added definitions from Ch. 20, some language updated
22.2	22.2	Processing permit applications	Processing permit applications	
22.3	22.3	Issuing permits	Issuing permits	
22.4	22.4	Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD)	Major stationary sources located in areas designated attainment or unclassified (PSD)	
22.5	22.5	Special requirements for nonattainment areas	Major stationary sources located in areas designated Nonattainment	
22.6	22.6	Nonattainment area designations	Reserved	

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
22.7	22.7	Alternative emission control program	Alternative emission control program	
22.8	22.8	Permit by rule	Permit by rule	
22.9	22.9	Special requirements for visibility protection	Special requirements for visibility protection	A lot of language updated or removed
22.10	22.10	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated
22.12 to 22.99	N/A	Reserved	N/A	Removed
<b>22.100 - 22.300(12)</b>	<b>(New) 24</b>	<b>N/A</b>	<b>Operating Permits</b>	<b>Moved operating permit rules from Ch. 22 to Ch. 24.</b>
22.100	24.100	Definitions for Title V operating permits	Definitions for Title V operating permits	Moved from Ch. 22, some language updated, many 40 CFR 70 definitions adopted by reference
22.101	24.101	Applicability of Title V operating permit requirements	Applicability of Title V operating permit requirements	Moved from Ch. 22, some language updated to correct punctuation and remove old dates
22.102	24.102	Source category exemptions	Source category exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.103	24.103	Insignificant activities	Insignificant activities	Moved from Ch. 22, some language updated to correct typos and remove old dates
22.104	24.104	Requirement to have a Title V permit	Requirement to have a Title V permit	Moved from Ch. 22, some language updated no changes to rule text
22.105	24.105	Title V permit applications	Title V permit applications	Moved from Ch. 22, updated language to address electronic submissions and remove past application due dates
22.106	24.106	Annual Title V emissions inventory	Annual Title V emissions inventory	Moved from Ch. 22, no changes to rule text
22.107	24.107	Title V permit processing procedures	Title V permit processing procedures	Moved from Ch. 22, some language updated to update locations of public records and remove old CFR amendment dates
22.108	24.108	Permit content	Permit content	Moved from Ch. 22, some language updated to correct punctuation, remove old dates, and adopt 40 CFR 70 rules by reference
22.109	24.109	General permits	General permits	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.110	24.110	Changes allowed without a Title V permit revision (off-permit revisions)	Changes allowed without a Title V permit revision (off-permit revisions)	Moved from Ch. 22, some language updated to remove redundant language
22.111	24.111	Administrative amendments to Title V permits	Administrative amendments to Title V permits	Moved from Ch. 22, no changes to rule text
22.112	24.112	Minor Title V permit modifications	Minor Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.113	24.113	Significant Title V permit modifications	Significant Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.114	24.114	Title V permit reopenings	Title V permit re-openings	Moved from Ch. 22 to Ch. 24, some language updated to adopt 40 CFR 70 rules by reference
22.115	24.115	Suspension, termination, and revocation of Title V permits	Suspension, termination, and revocation of Title V permits	Moved from Ch. 22, no changes to rule text
22.116	24.116	Title V permit renewals	Title V permit renewals	Moved from Ch. 22, no changes to rule text
22.117-22.119	24.117-24.119	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.120	24.120	Acid rain program—definitions	Acid rain program—definitions	Moved from Ch. 22, some language updated to remove old CFR amendment dates and address electronic submissions
22.121	24.121	Measurements, abbreviations, and acronyms	Reserved	Moved from Ch. 22, no changes to rule text
22.122	24.122	Applicability	Applicability	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.123	24.123	Acid rain exemptions	Acid rain exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.124	24.124	Retired units exemption	Reserved	Moved from Ch. 22, no changes to rule text
22.125	24.125	Standard requirements	Standard requirements	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.126	24.126	Designated representative—submissions	Designated representative—submissions	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.127	24.127	Designated representative—objections	Designated representative—objections	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.128	24.128	Acid rain applications—requirement to apply	Acid rain applications—requirement to apply	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference

22.129	24.129	Information requirements for acid rain permit applications	Information requirements for acid rain permit applications	Moved from Ch. 22, no changes to rule text
Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
22.130	24.130	Acid rain permit application shield and binding effect of permit application	Acid rain permit application shield and binding effect of permit application	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.131	24.131	Acid rain compliance plan and compliance options—general	Acid rain compliance plan and compliance options—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.132	24.132	Repowering extensions	Reserved	Moved from Ch. 22, no changes to rule text
22.133	24.133	Acid rain permit contents—general	Acid rain permit contents—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.134	24.134	Acid rain permit shield	Acid rain permit shield	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.135	24.135	Acid rain permit issuance procedures—general	Acid rain permit issuance procedures—general	Moved from Ch. 22, no changes to rule text
22.136	24.136	Acid rain permit issuance procedures—completeness	Acid rain permit issuance procedures—completeness	Moved from Ch. 22, no changes to rule text
22.137	24.137	Acid rain permit issuance procedures—statement of basis	Acid rain permit issuance procedures—statement of basis	Moved from Ch. 22, no changes to rule text
22.138	24.138	Issuance of acid rain permits	Issuance of acid rain permits	Moved from Ch. 22, some language updated to remove old dates and deadlines
22.139	24.139	Acid rain permit appeal procedures	Acid rain permit appeal procedures	Moved from Ch. 22, no changes to rule text
22.140	24.140	Permit revisions—general	Permit revisions—general	Moved from Ch. 22, some language updated to remove old dates
22.141	24.141	Permit modifications	Permit modifications	Moved from Ch. 22, no changes to rule text
22.142	24.142	Fast-track modifications	Fast-track modifications	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.143	24.143	Administrative permit amendment	Administrative permit amendment	Moved from Ch. 22, some language updated to remove fax option
22.144	24.144	Automatic permit amendment	Automatic permit amendment	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.145	24.145	Permit reopenings	Permit re-openings	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.146	24.146	Compliance certification—annual report	Compliance certification—annual report	Moved from Ch. 22, no changes to rule text
22.147	24.147	Compliance certification—units with repowering extension plans	Reserved	Moved from Ch. 22, no changes to rule text
22.148	24.148	Sulfur dioxide opt-ins	Sulfur dioxide opt-ins	Moved from Ch. 22, some language updated to update the 40 CFR Part 74 amendment date
22.149 - 22.199	24.149 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.200	24.200 - 24.299	Definitions for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.201	24.200 - 24.299	Eligibility for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.203	24.200 - 24.299	Voluntary operating permit applications	Reserved	Moved from Ch. 22, no changes to rule text
22.204	24.200 - 24.299	Voluntary operating permit fees	Reserved	Moved from Ch. 22, no changes to rule text
22.205	24.200 - 24.299	Voluntary operating permit processing procedures	Reserved	Moved from Ch. 22, no changes to rule text
22.206	24.200 - 24.299	Permit content	Reserved	Moved from Ch. 22, no changes to rule text
22.207	24.200 - 24.299	Relation to construction permits	Reserved	Moved from Ch. 22, no changes to rule text
22.208	24.200 - 24.299	Suspension, termination, and revocation of voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.209	24.200 - 24.299	Change of ownership for facilities with voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.210 - 22.299	24.200 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.300	24.300	Operating permit by rule for small sources	Operating permit by rule for small sources	Moved from Ch. 22, no changes to rule text

23	23	Emission Standards	Air Emission Standards	Kept
23.1	23.1	Emission standards	Emission standards	Kept, language updated, tables used
23.2	23.2	Open burning	Open burning	Kept, some language updated
23.3	23.3	Specific contaminants	Specific contaminants	Kept, some language updated
23.4	23.4	Specific processes	Specific processes	Kept, some language updated
23.5	23.5	Anaerobic lagoons	Anaerobic lagoons	Kept, some language updated
23.6	23.6	Alternative emission limits (the “bubble concept”)	Reserved	Removed

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
<b>24</b>	<b>(New) 21</b>	<b>Excess Emissions</b>	<b>Compliance, Excess Emissions, and Measurement of Emissions</b>	<b>Moved rules and combined with Ch. 21.</b> <b>Moved operating permit rules here (to Ch. 24).</b>
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
<b>25</b>	<b>(New) 21</b>	<b>Emissions Measurement</b>	<b>Compliance, Excess Emissions, and Measurement of Emissions</b>	<b>Moved rules and combined with Ch. 21.</b> <b>Rescinded Ch. 25. (Reserved)</b>
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3		Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
<b>26</b>	<b>(New) 21</b>	<b>Emergency Air Pollution Episodes</b>	<b>Compliance, Excess Emissions, and Measurement of Emissions</b>	<b>Moved rules and combined with Ch. 21.</b> <b>Rescinded Ch. 26. (Reserved)</b>
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
<b>27</b>	<b>27</b>	<b>Local Program Acceptance</b>	<b>Local Program Acceptance</b>	<b>Kept</b>
27.1	27.1	General	General	Kept, some language updated
27.2	27.2	Certificate of acceptance	Certificate of acceptance	Kept, some language updated
27.3	27.3	Ordinance or regulations	Ordinance or regulations	Kept, some language updated
27.4	27.4	Administrative organization	Administrative organization	Kept, some language updated
27.5	27.5	Program activities	Program activities	Kept, some language updated
<b>28</b>	<b>22</b>	<b>NAAQS</b>	<b>N/A</b>	<b>Moved rules and combined with Ch. 22.</b> <b>Rescinded Ch. 28. (Reserved)</b>
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	<b>Moved from Ch. 28, minor language updated</b> <b>Rescinded Ch. 28. (Reserved)</b>
<b>29</b>	<b>(New) 21</b>	<b>Opacity Qualifications</b>	<b>Compliance, Excess Emissions, and Measurement of Emissions</b>	<b>Moved rules and combined with Ch. 21.</b> <b>Rescinded Ch. 29. (Reserved)</b>
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
<b>30</b>	<b>30</b>	<b>Fees</b>	<b>Fee</b>	<b>Kept</b>
30.1	30.1	Purpose	Purpose	Kept, language updated
30.2	30.2	Fees associated with new source review applications	Fees associated with new source review applications	Kept, some language updated
30.3	30.3	Fees associated with asbestos demolition or renovation notification	Fees associated with asbestos demolition or renovation notification	Kept, some language updated
30.4	30.4	Fees associated with Title V operating permits	Fees associated with Title V operating permits	Kept, some language updated
30.5	30.5	Fee advisory groups	Fee advisory groups	Kept, language updated
30.6	30.6	Process to establish or adjust fees and notification of fee rates	Process to establish or adjust fees and notification of fee rates	Kept, some language updated
30.7	30.7	Fee revenue	Reserved	Language removed
<b>31</b>	<b>31</b>	<b>Nonattainment Areas</b>	<b>Nonattainment New Source Review</b>	<b>Kept</b>
31.1	31.1	Permit requirements relating to nonattainment areas	Permit requirements relating to nonattainment areas	Kept, some language updated
31.2	31.2	Conformity of general federal actions to the Iowa state implementation plan or federal implementation plan - Rescinded	Reserved	Language removed
31.3	31.3	Nonattainment new source review requirements for areas designated nonattainment on or after May 18, 1998	Nonattainment new source review (NNSR) requirements for areas designated nonattainment	Kept, some language updated
31.4	31.4	Preconstruction review permit program	Preconstruction review permit program	Kept
31.5 - 31.8	31.5 - 31.8	Reserved	Reserved	Kept
31.9	31.9	Actuals PALs	Actuals PALs	Kept, some language updated
31.10	31.10	Validity of rules	Validity of rules	Kept
31.11 - 31.19	N/A	Reserved	N/A	Rescinded and removed
31.20	N/A	Special requirements for nonattainment areas designated before May 18, 1998	N/A	Rescinded and removed
<b>32</b>	<b>N/A</b>	<b>AFO Field Study</b>	<b>N/A</b>	<b>Rescinded Ch. 32. (Reserved)</b>
32.1	N/A	Animal feeding operations field study	N/A	Rescinded, reserved, and language removed
32.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
32.3	N/A	Exceedance of the health effects value (HEV) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.4	N/A	Exceedance of the health effects standard (HES) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.5	N/A	Iowa Air Sampling Manual	N/A	Rescinded, reserved, and language removed
<b>33</b>	<b>33</b>	<b>Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality</b>	<b>Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)</b>	<b>Kept</b>
33.1	33.1	Purpose	Purpose	Kept, some language updated
33.2	33.2	Reserved	Reserved	Kept
33.3	33.3	Special construction permit requirements for major stationary sources in areas designated attainment or unclassified (PSD)	PSD construction permit requirements for major stationary sources	Kept, some language updated
33.4 - 33.8	33.4 - 33.8	Reserved	Reserved	Kept
33.9	33.9	Plantwide applicability limitations (PALs)	Plantwide applicability limitations (PALs)	Kept, some language updated
33.10	33.10	Exceptions to adoption by reference	Exceptions to adoption by reference	Kept, some language updated

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
<b>34</b>	<b>N/A</b>	<b>Emissions Trading-CAIR-CAMR</b>	<b>N/A</b>	<b>Rescinded Ch. 34. (Reserved)</b>
34.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
34.2 - 34.199	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.200	N/A	Provisions for air emissions trading and other requirements for the Clean Air Interstate Rule (CAIR) - rescinded	N/A	Rescinded, reserved, and language removed
34.201	N/A	CAIR NOx annual trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.202	N/A	CAIR designated representative for CAIR NOx sources - rescinded	N/A	Rescinded, reserved, and language removed
34.203	N/A	Permits - rescinded	N/A	Rescinded, reserved, and language removed
34.204	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.205	N/A	CAIR NOx allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.206	N/A	CAIR NOx allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.207	N/A	CAIR NOx allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.208	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.209	N/A	CAIR NOx opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.210	N/A	CAIR SO2 trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.211 - 34.219	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.220	N/A	CAIR NOx ozone season trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.221	N/A	CAIR NOx ozone season trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.222	N/A	CAIR designated representative for CAIR NOx ozone season sources - rescinded	N/A	Rescinded, reserved, and language removed
34.223	N/A	CAIR NOx ozone season permits - rescinded	N/A	Rescinded, reserved, and language removed
34.224	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.225	N/A	CAIR NOx ozone season allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.226	N/A	CAIR NOx ozone season allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.227	N/A	CAIR NOx ozone season allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.228	N/A	CAIR NOx ozone season monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.229	N/A	CAIR NOx ozone season opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.230 - 34.299	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.300	N/A	Provisions for air emissions trading and other requirements for the Clean Air Mercury Rule (CAMR) - rescinded	N/A	Rescinded, reserved, and language removed
34.301	N/A	Mercury (Hg) budget trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.302	N/A	Hg designated representative for Hg budget sources - rescinded	N/A	Rescinded, reserved, and language removed
34.303	N/A	General Hg budget trading program permit requirements - rescinded	N/A	Rescinded, reserved, and language removed
34.304	N/A	Hg allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.305	N/A	Hg allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed

34.306	N/A	Hg allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
34.307	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.308	N/A	Performance specifications - rescinded	N/A	Rescinded, reserved, and language removed
<b>35</b>	<b>N/A</b>	<b>Grant Assistance Programs</b>	<b>N/A</b>	<b>Rescinded Ch. 35. (Reserved)</b>
35.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
35.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
35.3	N/A	Role of the department of natural resources	N/A	Rescinded, reserved, and language removed
35.4	N/A	Eligible projects	N/A	Rescinded, reserved, and language removed
35.5	N/A	Forms	N/A	Rescinded, reserved, and language removed
35.6	N/A	Project selection	N/A	Rescinded, reserved, and language removed
35.7	N/A	Funding sources	N/A	Rescinded, reserved, and language removed
35.8	N/A	Type of financial assistance	N/A	Rescinded, reserved, and language removed
35.9	N/A	Term of loans	N/A	Rescinded, reserved, and language removed
35.10	N/A	Reduced award	N/A	Rescinded, reserved, and language removed
35.11	N/A	Fund disbursement limitations	N/A	Rescinded, reserved, and language removed
35.12	N/A	Applicant cost share	N/A	Rescinded, reserved, and language removed
35.13	N/A	Eligible costs	N/A	Rescinded, reserved, and language removed
35.14	N/A	Ineligible costs	N/A	Rescinded, reserved, and language removed
35.15	N/A	Written agreement	N/A	Rescinded, reserved, and language removed
35.16	N/A	Financial assistance denial	N/A	Rescinded, reserved, and language removed