Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Northern Natural Gas Co – Waterloo Compressor Station
Facility Location: 1508 East Schrock Road, Waterloo, IA 50701

Air Quality Operating Permit Number: 01-TV-016R3-M002
Expiration Date: 05/22/2023
Permit Renewal Application Deadline: 11/22/2022

EIQ Number: 92-3877
Facility File Number: 07-01-057

<u>Responsible Official</u>
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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

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Lori Hanson, Supervisor of Air Operating Permits Section Date

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Abbreviations

acfm.....actual cubic feet per minute
CFR.....Code of Federal Regulation
CE .....control equipment
CEM.....continuous emission monitor
^{o}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
DNR .....Iowa Department of Natural Resources
MVAC.....motor vehicle air conditioner
NAICS.....North American Industry Classification System
NSPS .....new source performance standard
ppmv .....parts per million by volume
lb./hr .....pounds per hour
lb./MMBtu .....pounds per million British thermal units
SCC.....Source Classification Codes
scfm.....standard cubic feet per minute
SIC …… Standard Industrial Classification
TPY .....tons per year
USEPA.....United States Environmental Protection Agency

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

I. Facility Description and Equipment List

Facility Name: Northern Natural Gas Co– Waterloo Compressor Station
Permit Number: 01-TV-016R3-M002

Facility Description: Natural Gas Transmission (SIC 4922)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
1.00	1.00	Compressor Unit #1	Grandfathered
2.00	2.00	Compressor Unit #2	Grandfathered
3.00	3.00	Compressor Unit #3	Grandfathered
4.00	4.00	Compressor Unit #4	Grandfathered
5.00	5.00	Compressor Unit #5	90-A-311
6.00	6.00	Compressor Unit #6	
7.00	7.00	Compressor Turbine Unit #7	93-A-373-S4
7/8	7/8	Line Heater	NA
8.00	8.00	Compressor Turbine Unit #8	93-A-374-S4
10.00	10.00	Auxiliary Generator	90-A-248-S3
11.00	11.00	Natural Gas Boiler	NA
12.00	12.00	Emergency Generator	NA

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
PH	Plant Heating - (10) Small Natural Gas Fired Units. Each unit <10 MMBtu; Total =0.606 MMBtu/hr
Tank 1	500 gallon oily water tank
Tank 2	6,000 gallon used oil tank
Tank 3	3,050 gallon glycol tank
Tank 4	500 gallon used oil tank
Tank 6	1,500 gallon used glycol tank
Tank 9	2,000 gallon pipeline liquids tank
Tank 10	500 gallon flammable liquids tank
Tank 11	1,000 gallon lube oil tank
Tank 15	76 gallon oily water tank
Tank 16	165 gallon oily water tank
Tank 17	425 gallon oily water tank
Tank 18	12,500 gallon oil tank
Tank 19	300 gallon diesel fuel tank
Tank 20	500 gallon used oil tank
Tank 21	165 gallon used oil tank
Tank 22	165 gallon used oil tank
Tank 23	425 gallon oily water tank

II. Plant-Wide Conditions

Facility Name: Northern Natural Gas Co – Waterloo Compressor Station
Permit Number: 01-TV-016R3-M002

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

Permit Duration

The term of this permit is: Five (5) years
Commencing on: 05/23/2018
Ending on: 05/22/2023

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

Emission Limits

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

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

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

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

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

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

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

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

III. Emission Point Specific Conditions

Facility Name: Northern Natural Gas Co – Waterloo Compressor Station
Permit Number: 01-TV-016R3-M002

Emission Point ID Numbers: See Table 1 – Compressor Engines

Associated Equipment

Table 1 – Compressor Engines
Emission Point = EP, Emission Unit=EU

EP ID	EU ID	Emission Unit Description	Raw Material / Fuel	Rated Capacity (MMscf/hr)	BPH
1.00	1.00	Compressor Unit #1	Natural Gas	0.0139	2000
2.00	2.00	Compressor Unit #2	Natural Gas	0.0139	2000
3.00	3.00	Compressor Unit #3	Natural Gas	0.0139	2000
4.00	4.00	Compressor Unit #4	Natural Gas	0.0139	2000

Applicable Requirements

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

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

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting and Recordkeeping Requirements

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

NESHAP Subpart ZZZZ Requirements:

The non-emergency engines are 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)(i) non-emergency engines, located a major source, are an existing stationary RICE as they were constructed prior to December 19, 2002.

According to 63.6590(b)(3)(i), existing 2SLB RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions do not have to meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 5.00

Associated Equipment

Associated Emission Unit ID Number: 5.00

Emission Unit vented through this Emission Point: 5.00
Emission Unit Description: Compressor Unit #5
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.0278 MMscf/hr (4000 BHP)

Applicable Requirements

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

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

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.8 gms/BHP-hr, 15.9 lb/hr, 69.5 TPY
Authority for Requirement: DNR Construction Permit 90-A-311

Pollutant: Nonmethane Hydrocarbons (NMHC)
Emission Limit(s): 0.65 gms/BHP-hr, 5.7 lb/hr, 25.1 TPY
Authority for Requirement: DNR Construction Permit 90-A-311

Pollutant: Carbon Dioxide (CO)
Emission Limit(s): 2.5 gms/BHP-hr, 22.0 lb/hr, 96.5 TPY
Authority for Requirement: DNR Construction Permit 90-A-311

Operational Limits & Reporting and Recordkeeping Requirements

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

The owner/operator shall, on a weekly basis for unmanned engines and on a daily basis for manned engines, monitor and record the following parameters. All monitoring systems shall be accurate to within five percent and shall be approved by the Iowa DNR.

1) Intake manifold temperatures
2) Intake manifold pressure
3) Fuel header pressure
4) Engine speed
5) Spark ignition timing

The owner/operator shall submit reports of excess emissions in accordance with the procedures outline in 40 CFR 60.7(c). Periods of excess emissions that shall be reported are defined as any daily (for manned engines) or weekly (for unmanned engines) period during which any one of the parameters listed above falls outside the range identified for that parameter. Each excess emission report shall include the range identified for each operator parameter listed above, the monitored value for each operating parameter listed above, the ambient air conditions during the period of excess emissions, and any graphs and/or figures developed during NOx stack testing.

Authority for Requirement: DNR Construction Permit 90-A-311

NESHAP Subpart ZZZZ Requirements:

The non-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)(i) this non-emergency engine, located a major source, is an existing stationary RICE as it was constructed prior to December 19, 2002.

According to 63.6590(b)(3)(i), an existing 2SLB RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions does not have to meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 6.00

Associated Equipment

Associated Emission Unit ID Number: 6.00

Emission Unit vented through this Emission Point: 6.00
Emission Unit Description: Compressor Unit #6
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.0153 MMscf/hr (2250 BPH)

Applicable Requirements

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

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

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.8 gms/BHP-hr, 7.9 lb/hr, 34.8 TPY
Authority for Requirement: DNR Construction Permit 90-A-311

Pollutant: Nonmethane Hydrocarbons (NMHC)
Emission Limit(s): 0.65 gms/BHP-hr, 2.9 lb/hr, 12.6 TPY
Authority for Requirement: DNR Construction Permit 90-A-311

Pollutant: Carbon Dioxide (CO)
Emission Limit(s): 2.5 gms/BHP-hr, 11.0 lb/hr, 48.3 TPY
Authority for Requirement: DNR Construction Permit 90-A-311

Operational Limits & Reporting and Recordkeeping Requirements

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

The owner/operator shall, on a weekly basis for unmanned engines and on a daily basis for manned engines, monitor and record the following parameters. All monitoring systems shall be accurate to within five percent and shall be approved by the Iowa DNR.

1) Intake manifold temperatures
2) Intake manifold pressure
3) Fuel header pressure
4) Engine speed
5) Spark ignition timing

The owner/operator shall submit reports of excess emissions in accordance with the procedures outline in 40 CFR 60.7(c). Periods of excess emissions that shall be reported are defined as any daily (for manned engines) or weekly (for unmanned engines) period during which any one of the parameters listed above falls outside the range identified for that parameter. Each excess emission report shall include the range identified for each operator parameter listed above, the monitored value for each operating parameter listed above, the ambient air conditions during the period of excess emissions, and any graphs and/or figures developed during NOx stack testing.

Authority for Requirement: DNR Construction Permit 90-A-311

NESHAP Subpart ZZZZ Requirements:

The non-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)(i) this non-emergency engine, located a major source, is an existing stationary RICE as it was constructed prior to December 19, 2002.

According to 63.6590(b)(3)(i), an existing 2SLB RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions does not have to meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7.00

Associated Equipment

Associated Emission Unit ID Number: 7.00

Emission Unit vented through this Emission Point: 7.00
Emission Unit Description: Compressor Turbine Unit #7
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.0155 MMcf/hr (1200 BHP)

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %[1]
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 93-A-373-S4

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.6 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 93-A-373-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf, 2.7 lb/hr
Authority for Requirement: DNR Construction Permit 93-A-373-S4
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.37 lb/hr, 150 ppmv at 15% oxygen on a dry basis
Authority for Requirement: 567 IAC 23.1(2)"aa"
DNR Construction Permit 93-A-373-S4
40 CFR 60 Subpart GG

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 4.5 lb/hr, 150 ppmv at 15% oxygen on a dry basis
Authority for Requirement: 567 IAC 23.1(2)"aa"
DNR Construction Permit 93-A-373-S4
40 CFR 60 Subpart GG

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 7.5 lb/hr
Authority for Requirement: DNR Construction Permit 93-A-373-S4

Operational Limits & Reporting and Recordkeeping Requirements

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

Operating Limits:

A. The turbine shall use only pipeline quality natural gas as fuel.

B. For each switchout of a turbine engine core, the following requirements shall be followed:
   a. Only engine cores that are of the same make, model, horsepower and emission rating as the existing engine core may be exchanged and replaced.
   b. No changes in the engine cores affecting combustion characteristics shall be allowed that result in any emission increase.
   c. A stack test to demonstrate continued compliance with the NOx and CO emission limits will be required within 180 days of each replacement.
      i. Test results from EP 8.00 may be used to demonstrate compliance with the CO emission limits if the test results used are for the current engine core of EP 8.00.

Reporting and Recordkeeping Requirements:

A. Nitrogen monitoring requirements of Subpart GG shall be waived for pipeline quality natural gas.

B. For each engine core switchout, the following requirements shall be met:
   a. The owner or operator shall evaluate each required NOx test result according to the standards set forth in 40 CFR Appendix C to Part 60, and have this analysis available on site for review. The owner or operator shall notify the DNR within 30 days if this analysis indicates an increase in NOx emissions to the atmosphere.
   b. A log shall be kept of all engine core replacements, which lists the date of each replacement, and any components of the new engine core that differ from the previous engine core. If any components differ from the previous engine core, the record shall also note any effect on the combustion characteristics involved.

C. Sulfur Monitoring Condition:
   a. Analysis for fuel sulfur content of the natural gas shall be conducted using analytical techniques of quality equal to or better than approved ASTM reference methods. Approved reference methods are: ASTM D1072-80, ASTM D3031-81, ASTM D3246-81 and ASTM D4084-82. Analytical data from the fuel supplier is also acceptable.
   b. Effective on the date of the custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If the monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333 and the

conditions of this permit, then sulfur monitoring shall be conducted once per month for six quarters.

c. If after the monitoring required in Sulfur Monitoring Condition b, the monitoring shows little variability calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified at 40 CFR 60.333 and the conditions of this permit, sample analysis shall be conducted twice each calendar year, in the first and third quarters.
d. Should any sulfur analysis required in Sulfur Monitoring Condition b and c indicate noncompliance with 40 CFR 60.333 or the conditions of this permit, the owner or operator must notify the DNR of such excess emissions.
e. If there is a change in fuel supply, the owner or operator must notify the DNR of the change.

Authority for Requirement: DNR Construction Permit 93-A-373-S4
40 CFR 60 subpart GG
567 IAC 23.1(2)"aa"

NSPS Subpart GG Requirements:
This emission unit is regulated by the Standards of Performance for Stationary Gas Turbines, 40 CFR, Part 60, Subpart GG. This facility constructed stationary gas turbines with a heat input at peak load greater than 10 MMBtu/hr after October 3, 1977 and is therefore subject to all applicable requirements of 40 CFR Part 60, Subpart GG and 40 CFR Part 60, Subpart A – General Provisions.

Authority for Requirements: 40 CFR 60 Subpart GG
567 IAC 23.1(2) "aa"

NESHAP Subpart YYYY Requirements:
This Stationary combustion turbine is subject to 40 CFR 63 Subpart YYYY National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. According to 40 CFR 63.6090(a)(1) this is stationary combustion turbine located at a major source, is an existing source as it commenced construction or reconstruction prior to January 14, 2003

According to 40 CFR 63.6090(b)(4), existing stationary combustion turbines in all subcategories do not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification.

Authority for Requirements: 40 CFR 63 Subpart YYYY
567 IAC 23.1(3) "cy"

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

Stack Height (feet): 45
Stack Opening, (inches, dia.): 22
Exhaust Flow Rate (scfm): 10,720
Stack Temperature (^{o}F): 842
Discharge Style: Vertical, Unobstructed

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

Authority for Requirement: DNR Construction Permit 93-A-373-S4

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

Stack Testing

Pollutant - NOx
Stack Test to be completed within 180 days of each core replacement
Test Method - 40 CFR 60, Appendix A, Method 7E
Authority for Requirement: DNR Construction Permit 93-A-374-S4

Pollutant - CO
Stack Test to be completed within 180 days of each core replacement
Test Method - 40 CFR 60, Appendix A, Method 10
Authority for Requirement: DNR Construction Permit 93-A-374-S4

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 22.108(3)

Emission Point ID Number: 7/8

Associated Equipment

Associated Emission Unit ID Numbers: 7/8

Emission Unit vented through this Emission Point: 7/8
Emission Unit Description: Line Heater
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.15 MMBtu/hr

Applicable Requirements

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

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting and Recordkeeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. 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. The owner/operator shall maintain the following records:

NESHAP Subpart DDDDD Requirements:
This Emission Unit is subject to the requirements of 40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial and institutional boilers and process heaters.

Authority for Requirement: 40 CFR 63 Subpart DDDDD
567 IAC 23.1(4)"dd"

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 8.00

Associated Equipment

Associated Emission Unit ID Number: 8.00

Emission Unit vented through this Emission Point: 8.00
Emission Unit Description: Compressor Turbine Unit #8
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.0155 MMcf/hr (1200 BHP)

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %[1]
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 93-A-374-S4

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.6 lb/hr
Authority for Requirement: DNR Construction Permit 93-A-374-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 2.7 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 93-A-374-S4
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.37 lb/hr, 150 ppmv at 15% oxygen on a dry basis
Authority for Requirement: 567 IAC 23.1(2)"aa"
DNR Construction Permit 93-A-374-S4
40 CFR 60 Subpart GG

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 4.5 lb/hr, 150 ppmv at 15% oxygen on a dry basis
Authority for Requirement: 567 IAC 23.1(2)"aa"
DNR Construction Permit 93-A-374-S4
40 CFR 60 Subpart GG

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 7.5 lb/hr
Authority for Requirement: DNR Construction Permit 93-A-374-S4

Operational Limits & Reporting and Recordkeeping Requirements

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

Operating Limits and Testing Requirements:

A. The turbine shall use only pipeline quality natural gas as fuel.
B. For each switchout of a turbine engine core, the following requirements shall be followed:
    a. Only engine cores that are of the same make, model, horsepower and emission rating as the existing engine core may be exchanged and replaced.
    b. No changes in the engine cores affecting combustion characteristics shall be allowed that result in any emission increase.
    c. A stack test to demonstrate continued compliance with the NOx and CO emission limits will be required within 180 days of each replacement.
        i. Test results from EP 7.00 may be used to demonstrate compliance with the CO emission limit if the test results used are for the current engine core of EP 7.00.

Reporting & Recordkeeping:

A. Nitrogen monitoring requirements of Subpart GG shall be waived for pipeline quality natural gas.
B. For each engine core switchout, the following requirements shall be met:
    a. The owner or operator shall evaluate each required NOx test result according to the standards set forth in 40 CFR Appendix C to Part 60, and have this analysis available on site for review. The owner or operator shall notify the DNR within 30 days if this analysis indicates an increase in NOx emissions to the atmosphere.
    b. A log shall be kept of all engine core replacements, which lists the date of each replacement, and any components of the new engine core that differ from the previous engine core. If any components differ from the previous engine core, the record shall also note any effect on the combustion characteristics involved.
C. Sulfur Monitoring Condition:
    a. Analysis for fuel sulfur content of the natural gas shall be conducted using analytical techniques of quality equal to or better than approved ASTM reference methods. Approved reference methods are: ASTM D1072-80, ASTM D3031-81,

ASTM D3246-81 and ASTM D4084-82. Analytical data from the fuel supplier is also acceptable.

b. Effective on the date of the custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If the monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333 and the conditions of this permit, then sulfur monitoring shall be conducted once per month for six quarters.
c. If after the monitoring required in Sulfur Monitoring Condition b above, the monitoring shows little variability calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified at 40 CFR 60.333 and the conditions of this permit, sample analysis shall be conducted twice each calendar year, in the first and third quarters.
d. Should any sulfur analysis required in Sulfur Monitoring Condition b and c above indicate noncompliance with 40 CFR 60.333 or the conditions of this permit, the owner or operator must notify the DNR of such excess emissions.
e. If there is a change in fuel supply, the owner or operator must notify the DNR of the change.

Authority for Requirement: DNR Construction Permit 93-A-374-S4
40 CFR 60 subpart GG
567 IAC 23.1(2)"aa"

NSPS Subpart GG Requirements:
This emission unit is regulated by the Standards of Performance for Stationary Gas Turbines, 40 CFR, Part 60, Subpart GG. This facility constructed stationary gas turbines with a heat input at peak load greater than 10 MMBtu/hr after October 3, 1977 and is therefore subject to all applicable requirements of 40 CFR Part 60, Subpart GG and 40 CFR Part 60, Subpart A – General Provisions.

Authority for Requirements: 40 CFR 60 Subpart GG
567 IAC 23.1(2) "aa"

NESHAP Subpart YYYY Requirements:
This Stationary combustion turbine is subject to 40 CFR 63 Subpart YYYY National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. According to 40 CFR 63.6090(a)(1) this is stationary combustion turbine located at a major source, is an existing source as it commenced construction or reconstruction prior to January 14, 2003

According to 40 CFR 63.6090(b)(4), Existing stationary combustion turbines in all subcategories do not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification.

Authority for Requirements: 40 CFR 63 Subpart YYYY
567 IAC 23.1(3) "cy"

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

Stack Height (feet): 45
Stack Opening (inches, dia.): 22
Exhaust Flow Rate (scfm): 10,720
Stack Temperature (^{o}F): 842
Discharge Style: Vertical, Unobstructed

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

Authority for Requirement: DNR Construction Permit 93-A-374-S4

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

Stack Testing

Pollutant - NOx
Stack Test to be completed within 180 days of each core replacement
Test Method - 40 CFR 60, Appendix A, Method 7E
Authority for Requirement: DNR Construction Permit 93-A-374-S4

Pollutant - CO
Stack Test to be completed within 180 days of each core replacement
Test Method - 40 CFR 60, Appendix A, Method 10
Authority for Requirement: DNR Construction Permit 93-A-374-S4

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 22.108(3)

Emission Point ID Number: 10.00

Associated Equipment

Associated Emission Unit ID Numbers: 10.00

Emission Unit vented through this Emission Point: 10.00
Emission Unit Description: Auxiliary Generator
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.003 MMscf/hr (600 BHP)

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permit 90-A-248-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.08 lb/hr
Authority for Requirement: DNR Construction Permit 90-A-248-S3

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 90-A-248-S3
567 IAC 23.3(3)"e"

<u>Operating Limits & Recordkeeping and Reporting Requirements</u>
The owner/operator of this equipment shall comply with the operational limits and requirements list below. 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. The owner/operator shall maintain the following records:

Operating Limits:

1. This generator shall only use Natural Gas as a fuel.

2. The generator shall operate no more than 250 hours per rolling twelve-month period other than those hours and provisions provided in the definition of emergency stationary RICE. The definition of emergency stationary RICE means any stationary RICE that operates in an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of facility) when electric power from the local utility is interrupted, or stationary RICE used to pump water in case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations. Emergency stationary RICE may also operate an additional 50 hours per year in non-emergency situation.

Recordkeeping and Reporting:

1. The owner or operator shall maintain a record of the type of fuel used to operate this generator.
2. The owner or operator shall maintain a record of the number of hours this generator operates each month. The owner or operator shall calculate a rolling twelve-month total of the hours of operation.

Authority for Requirement: DNR Construction Permit 90-A-248-S3

NESHAP Subpart ZZZZ Requirements:
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)(i) this emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to December 19, 2002.

According to 63.6590(b)(3)(iii), an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

To be considered an emergency engine, the following operating limits (40 CFR 63.6640(f)) must be met:

1. Any operation other than emergency operation, maintenance and testing 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. 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. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

This Emission point shall conform to the specifications list below.
Stack Height (feet): 15
Stack Diameter (inches): 8
Exhaust Flow Rate (scfm): 928
Stack Temperature (^{o}F): 1100
Discharge Style: Vertical, Unobstructed

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

Authority for Requirement: DNR Construction Permit 90-A-248-S3

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 11.00

Associated Equipment

Associated Emission Unit ID Number: 11.00

Emission Unit vented through this Emission Point: 11.00
Emission Unit Description: Natural Gas Boiler
Raw Material/Fuel: Natural Gas
Rated Capacity: 5.25 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(s): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppm
Authority for Requirement: 567 IAC 23.3(2)"e"

Operational Limits & Reporting and Recordkeeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. 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. The owner/operator shall maintain the following records:

NESHAP Subpart DDDDD Requirements:
This Emission Unit is subject to the requirements of 40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial and institutional boilers and process heaters.

Authority for Requirement: 40 CFR 63 Subpart DDDDD
567 IAC 23.1(4)"dd"

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 12.00

Associated Equipment

Associated Emission Unit ID Number: 12.00

Emission Unit vented through this Emission Point: 12.00
Emission Unit Description: Emergency Generator
Raw Material/Fuel: Natural Gas
Rated Capacity: 103 hp; 875 cf/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

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

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

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Operational Limits & Reporting and Recordkeeping Requirements

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

NSPS Subpart JJJJ Requirements

For Engines ≥ 100 hp, constructed after 6/12/2006 and manufactured on or after 1/1/2009: Emergency, SI, All Fuel (except Gasoline & Rich Burn LPG)

Emission Standards:
(40 CFR 60.4233(e) and Table 1 to Subpart JJJJ)

Maximum Engine Power	Manufacture Date	Emission Standards [1]						
		g/HP-hr				ppmvd at 15% O_2		
		NOx	HC + NOx	CO [2]	VOC [3]	NOx	CO	VOC
25 < HP < 130	1/1/2009+	N/A	10	387	N/A	N/A	N/A	N/A

[1] Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.
[2] See rule for alternative CO certification standards for engines ≥ 100 hp and manufactured prior to 1/1/2011.
[3] Formaldehyde emissions are not included.

Compliance Demonstrations:

1. You must demonstrate compliance with the emission standards according to one of following methods (40 CFR 60.4243(b)):
   a) Purchasing a certified engine that complies with the emission standards, or
   b) Purchasing a non-certified engine and demonstrating compliance with the emission standards. You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct performance tests to demonstrate compliance in accordance with 40 CFR 60.4244. Owners and operators are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 4243(b) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
25 < HP ≤ 500	Required	Not required

2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of required maintenance. 40 CFR 60.4243(b)(1), 4243(a) and 4245(a)(2).
3. Owners and operators of natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, a

performance test must be conducted to demonstrate compliance with the emission standards. 40 CFR 60.4243(e).

4. If you are an owner or operator of engine ≤ 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing, but you are not required to conduct subsequent performance testing unless the engine is rebuilt or undergoes major repair or maintenance. 40 CFR 60.4243(f).
5. Owners and operators of certified engines must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).
6. Owners and operators of non-certified engines or certified engines operating in a non-certified manner must keep documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).

Operating and Recordkeeping Requirements (40 CFR 4243(d))

1. Owners and operators of the following emergency SI engines that do not meet the applicable standards for non-emergency engines must install a non-resettable hour meter. 40 CFR 60.4237.

Maximum Engine Power	Engine Was Built On Or After
HP < 130	7/1/2008

2. There is no time limit on the use of the emergency engine in emergency situations.
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.
5. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.
6. Owners and operators of the following emergency SI that does not meet the applicable standards for a non-emergency engine must keep the following records. 40 CFR 60.4245(b).

Maximum Engine Power	Manufactured On Or After	Recordkeeping Requirement
25 < HP < 130	7/1/2008	Hours of operation recorded through a non-resettable hour meter. The owner or operator must 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.

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

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

G1. Duty to Comply

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

G2. Permit Expiration

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

G3. Certification Requirement for Title V Related Documents

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

G4. Annual Compliance Certification

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

G5. Semi-Annual Monitoring Report

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

G6. Annual Fee

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

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

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

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

G8. Duty to Provide Information

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

G9. General Maintenance and Repair Duties

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

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

G10. Recordkeeping Requirements for Compliance Monitoring

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

G13. Hazardous Release

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

G14. Excess Emissions and Excess Emissions Reporting Requirements

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

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

2. Excess Emissions Reporting

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

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

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

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
vi. The steps that were taken to limit the excess emission.
vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

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

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

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

G15. Permit Deviation Reporting Requirements

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

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

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

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

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

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));.

e. The changes comply with all applicable requirements.

f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,

ii. The date on which the change will occur,

iii. Any change in emission as a result of that change,

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

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

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

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

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

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

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

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

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

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

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

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

2. Minor Title V Permit Modification.

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

i. Do not violate any applicable requirement;

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

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

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

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

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

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

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

ii. The permittee's suggested draft permit;
iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

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

3. Significant Title V Permit Modification.

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

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

G19. Duty to Obtain Construction Permits

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

G20. Asbestos

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

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

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

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

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

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

    b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

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

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

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

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

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

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

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

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

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

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

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

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

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

G24. Permit Reopenings

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

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

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

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

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

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

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

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

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

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

e. The department or the administrator determines that the permit must be revised or

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

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

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

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

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

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

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

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

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

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

G27. Property Rights

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

G28. Transferability

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

G29. Disclaimer

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

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.
Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-9526

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

G31. Prevention of Air Pollution Emergency Episodes
The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.
567 IAC 26.1(1)

G32. Contacts List

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

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

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

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

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

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

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

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

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

Field Office 5
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-0268

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

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

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

V. Appendix A

EPA Custom Schedule

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

NOV 15 1999

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Leo F. Nichols, Ph.D. (ENRON/West Des Moines)
Division Environmental Specialist
Northern Natural Gas Company
P.O. Box 1188
Houston, TX 77251-1188

Dear Mr. Nichols:

Re: NSPS, Subpart GG -- Earlville, Waterloo and Guthrie Compressor Stations -- Custom Fuel Sulfur and/or Nitrogen Content Monitoring Schedule; Pipeline-Quality Natural Gas

In consideration of the information and statements in a letter sent to us on October 27, 1999, and in consideration of 40 CFR 60.334(b)(2) and 60.13(i), we hereby grant the custom schedule set forth below for application regarding the measurement of sulfur and nitrogen content of **pipeline-quality natural gas** to be burned in the NSPS/Subpart GG-affected turbines at the above-mentioned compressor stations:

(NOTE: The custom schedule and associated sulfur- and nitrogen-based provisions are effective upon the owner/operator's acceptance of this schedule (**see Item 4 of this letter**) and remain in effect unless the owner/operator subsequently informs the EPA regional office by letter that the owner/operator rejects the schedule or has decided to no longer comply with the schedule or associated provisions (in which case, the monitoring requirements as set forth in 40 CFR Part 60, Subpart GG, at the time of the owner/operator's letter automatically and immediately become applicable) or unless the custom schedule is replaced or revoked for any reason by EPA.

CUSTOM SCHEDULE

1. The "Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines" and the nitrogen content measurement waiver as set forth on the **Enclosure** attached to EPA memorandum entitled "Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG", dated Aug 14, 1987, is herein granted and incorporated by reference; a copy of the **Enclosure** is attached and is modified below.

1a. With regard to Condition 2.a of the above-mentioned Enclosure, the "approved alternative method" shall mean the following:

RECYCLE

The Gas Processors Association's (GPA's) Standard 2377 (Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes) or Standard, **as currently in effect and as may be revised from time-to-time by the GPA.** It is the owner/operator's responsibility to obtain the most recent updated version of GPA 2377 and to use said updated Standard as the measurement method for purposes of this custom schedule.

1b. The owner/operator shall inform the EPA regional office, by letter, of any revision to the Standard by the issuing entity, shall immediately begin using the revised Standard, and shall continue to use the revised Standard until the EPA regional office requests otherwise.

The owner/operator shall inform the EPA regional office, by letter, of the discontinuation of the Standard by the issuing entity. The owner/operator shall continue to use the discontinued Standard until the EPA regional office requests otherwise.

The above notification(s) regarding the revision or discontinuation of the Standard shall be sent to the regional office within 30 calendar days of the owner/operator's knowledge of such.

1c. With regard to Conditions 2.d and 3 of the **Enclosure**, the mention of "State" or "State Air Control Board" shall mean the EPA, Region VII, Air, RCRA and Toxics Division (ARTD); i.e., the EPA regional office.

1d. Our understanding is that each measurement will consist of a measurement of the sulfur compounds measurable by the Standard, that the sampling locations will be as stated in prior ENRON letters (i.e., Ogden, IA; Palmyra, NE; etc), that gas will not be introduced into the pipeline between the point of sampling and the point of combustion and that a "total" sulfur content will be determined.

2. For purposes of accountability and quality assurance regarding the recorded measurements, we suggest that certain information be recorded and maintained by the owner/operator (see Attachment A). Our suggestions, however, do not relieve the owner/operator of its responsibility to record and maintain all information that may be needed by the regional office to verify that the owner/operator has met all requirements and/or recommendations of GPA Standard 2377 or of the NSPS regulation.

3. This custom schedule is subject to revision or revocation, without prior notice, at the discretion of the EPA regional office.

4. **The owner/operator shall inform the EPA regional office by letter of its acceptance of this Custom Schedule (and associated provisions) and of the date the owner/operator will begin to implement the schedule.**

It is understood that a change of ownership will probably not void the schedule but that: (1) a change of location (of the turbines), of sampling location, or of gas suppliers and/or (2) the introduction of another gas supply into the current pipeline system between the point of sampling and the point of combustion may invalidate the schedule. The owner/operator shall notify the EPA regional office of any such change; said notification shall be by letter postmarked no later than 30 calendar days after such change.

5. If the owner/operator of the turbines decides to no longer comply with any requirement of this (or subsequently-revised) custom schedule, the owner/operator shall immediately comply with all applicable requirements of 40 CFR Part 60, Subpart GG, shall record and maintain appropriate records and shall notify the EPA regional office of the decision; said notification shall be made by letter to the Chief, Air Permitting and Compliance Branch of the EPA regional office, postmarked no later than 7 calendar days of said decision.

6. The above provisions presume that the owner/operator of the turbines affected by the requirements of this Custom Schedule will perform the fuel sulfur/nitrogen content measurement procedures. This document, however, allows the use of an outside party (e.g., an independent lab, the fuel supplier) to collect, record and/or maintain measurements for the owner/operator as long as:

(a) all requirements of this custom schedule document and all non-superseded applicable requirements of NSPS Subparts A and GG are met on an on-going basis;

(b) the owner/operator has given the EPA regional office prior written notice of such arrangement and of the date the arrangement will commence;

(c) the EPA regional office (and any other agency having inspection or implementation authority regarding NSPS Subpart GG) will have access to all pertinent records; and,

(d) the owner/operator assumes full responsibility regarding measurement frequency, data quality and implementation of the Standard's provisions.

7. Applicability of this Custom Schedule is site-specific. However, upon review of pertinent information, the EPA regional office may, by letter, allow the use of this schedule at subsequent unit location(s).

8. This granting of the Custom Schedule is intended to extend to subsequent owner/operators of the units in question unless a subsequent owner/operator voids the schedule under provision 5 or unless the EPA regional office voids the schedule under provision 3, above.

9. The **Custom Schedule** includes the provisions of EPA memo dated August 14, 1987 and the provisions of this overlying document.

10. The schedule is granted without a verification by the regional office that each turbine in question is an affected facility under 40 CFR Part 60, Subpart A and/or GG.

END OF CUSTOM SCHEDULE

If you have any questions pertaining to this letter, please contact me or Dan Rodriguez of my staff at 913/551-7020.

Sincerely,

Donald C. Toensing, Chief
Air Permitting and Compliance Branch

Enclosures: EPA memo dated Aug 14, 1987
Attachment A

cc: Catharine Fitzsimmons, IDNR - Compliance Section, Air Bureau

Attachment A

Re: Measurements Using GPA Standard 2377

For purposes of accountability and quality assurance regarding the recorded measurements, we suggest that the owner/operator, at a minimum, record and maintain the following information:

a. **Maintenance records** and **malfunction records** (possibly via appropriate "notes" on data record sheets) pertaining to the measurement equipment (e.g., pumps, containers).

b. **Purchase records** pertaining to the major components of the measurement equipment (e.g., pumps, detection tubes). At a minimum, the following additional information should be included: Quantity and date purchased/received, detection tube type (for H2S or for CO measurement) and model number, the detection range of the tubes purchased/received, pump model number, the temperature range of the tubes and data conversion sheets supplied by detection tube manufacturers. Retention of manufacturer spec sheets for the equipment in question will probably suffice if the sheets contain the needed information.

c. We suggest that each **data recording sheet** contain, at a minimum, the following recorded information (NOTE: Where appropriate, a "check sheet" format might be useful):

General Information

- The date of the reading, the number of pump strokes used to draw the gas through the detection tube, the measurement reading and the reader's name or initials (and the reader's affiliation if other than the owner/operator).
- Any adjustment calculations, if/when made.
- Each measurement expressed in terms of the reading and the applicable standard (e.g., ppm, by wt.) and, where NSPS Subpart GG requires, in terms of SO2 equivalent.
- Each completed data sheet should contain a signed statement by a manager equivalent or greater that the person making the measurement has been adequately trained by the owner/operator regarding the procedures of the Standard and that the measurement was made in accordance with the Standard.

Alternative Method-Specific Information

- An indication if the age of the tube used is greater than 2 years old relative to its date of manufacture.

- The temperature of the sampled gas.
- The results of the pump leak detection procedure recommended by the Standard. The leak detection procedure must be conducted prior to the use of the pump and each time the pump is used. A loss of vacuum within 30 seconds should be noted as well as corrective actions taken, if any.
- The tube's detection range or Model number.
- The duration of "purging" of the gas sample container prior to each measurement.

Appendix B

Links to Standards

1. 40 CFR 60 Subpart GG-Standards of Performance for Stationary Gas Turbines https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.14.60.gg

2. 40 CFR 63 Subpart YYYY – National Emission Standards for Hazardous Air Pollutants Stationary Combustion Turbines. https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.14.63.yyyy

3. 40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.14.63.zzzz

4. 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.14.63.ddddd