Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Western Minnesota Municipal Power Agency - Exira Station

Facility Location: 3429 Jay Avenue
Brayton, Iowa 50042

Air Quality Operating Permit Number: 06-TV-003R1
Expiration Date: 8/26/2017
Permit Renewal Application Deadline: 2/26/2017

EIQ Number: 92-6920
Facility File Number: 05-04-002

Responsible Official
Name: Mr. Raymond J. Wahle
Title: Director, Power Supply and Operations, Missouri River Energy Services
Mailing Address: 3724 W Avera Dr
PO Box 88920
Sioux Falls, SD 57109
Phone #: 605-338-4042

Permit Contact Person for the Facility
Name: Ms. Mrg Simon
Title: Director, Legal, Missouri River Energy Services
Mailing Address: 3724 W Avera Dr
PO BOX 88920
Sioux Falls, SD 57109
Phone #: (605) 338-4042

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

Douglas A. Campbell — 8/27/2012

Douglas A. Campbell, 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
gr/100 cf.....grains per one hundred cubic feet
IAC .....Iowa Administrative Code
IDNR.....Iowa Department of Natural Resources
MVAC .....motor vehicle air conditioner
NAICS .....North American Industry Classification System
NSPS.....new source performance standard
ppmv .....parts per million by volume
ppmvd .....parts per million by dry 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
$PM_{2.5}$.....particulate matter two and one half 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: Western Minnesota Municipal Power Agency - Exira Station
Permit Number: **06-TV-003R1**

Facility Description: Electric Services (SIC 4911) (NAICS 221112)

Equipment List

Emission Point ID	Emission Unit ID	Emission Unit Description	Iowa DNR Construction Permit
U-1	**U-1**	**Combustion Turbine – Unit 1**	**03-A-617-S1**
U-2	**U-2**	**Combustion Turbine – Unit 2**	**03-A-618-S1**
U-3	**U-3**	**Combustion Turbine – Unit 3**	**06-A-652-S1**

Emission Point ID	Emission Unit ID	Emission Unit Description	Iowa DNR Construction Permit
FP-1	**FP-1**	**Emergency Fire Water Pump**	**08-A-607**

Insignificant Activities Equipment List

Insignificant Emission Unit ID	Insignificant Emission Unit Description
Tank - 1	**Fuel Oil Storage Tank No. 1 (250,000 Gallons)**
Tank - 2	**Fuel Oil Storage Tank No. 2 (250,000 Gallons)**

II. Plant-Wide Conditions

Facility Name: Western Minnesota Municipal Power Agency - Exira Station
Permit Number: **06-TV-003R1**

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: **8/27/2012**
Ending on: **8/26/2017**

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

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

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

NSPS/NESHAP

40 CFR Part 60 Subpart GG: Standards of Performance for Stationary Gas Turbines

This facility is subject to Standards of Performance for Stationary Gas Turbines – 40 CFR 60 Subpart GG and the affected units are EU U-1 and EU U-2 (Combustion Turbine Units #1 and #2). However, the EPA approved a waiver of specific requirements under 40 CFR 60 Subpart GG (as proposed and later promulgated on July 8, 2004) on April 23, 2004 (Appendix 2). Affected unit EU U-3 (Combustion Turbine Unit #3) is subject Standards of Performance for Stationary Gas Turbines – 40 CFR 60 subpart GG as promulgated on February 24, 2006. The 2006 revision to 40 CFR 60 subpart GG incorporated alternative methods of monitoring and other provisions outlined in the prior 2004 EPA waiver Applicable subpart GG requirements are incorporated into the Emission-Point Specific Conditions Section.

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

40 CFR Part 60 Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This facility has equipment of the source category affected by the following federal regulation: New Source Performance Standard (NSPS) for Stationary Compression Ignition Internal Combustion Engines. The affected unit is EU FP-1, Emergency Fire Water Pump.

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

40 CFR 63 Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This facility has equipment of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

III. Emission Point-Specific Conditions

Facility Name: Western Minnesota Municipal Power Agency - Exira Station
Permit Number: **06-TV-003R1**

Emission Point ID Numbers: U-1, U-2 and U-3

Associated Equipment

EP	EU	EU Description	Raw Material/Fuel	Rated Capacity	CE ID & Description	CEM ID & Description
U-1	U-1	Combustion Turbine – Unit 1	Natural Gas	414 MMBtu/hr	CE-1 Water Injection	ME-1 NOx CEMS
			No. 2 Fuel Oil	424 MMBtu/hr		
U-2	U-2	Combustion Turbine – Unit 2	Natural Gas	414 MMBtu/hr	CE-2 Water Injection	ME-2 NOx CEMS
			No. 2 Fuel Oil	424 MMBtu/hr		
U-3	U-3	Combustion Turbine – Unit 3	Natural Gas	414 MMBtu/hr	CE-3 Water Injection	ME-3 NOx CEMS
			No. 2 Fuel Oil	424 MMBtu/hr		

Applicable Requirements

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

Pollutant: Opacity
Emission Limits: 40%[(1)]
Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter <10 microns (PM_{10})
Emission Limits: 30.38 lb/hr
Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

Pollutant: Particulate Matter (PM)
Emission Limits: 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter (PM)
Emission Limits: 30.38 lb/hr
Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

Pollutant: Sulfur Dioxide (SO_2) "(oil)"
Emission Limits: 23.02 lb/hr
Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

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

Pollutant: Nitrogen Oxides (NOx)
Emission Limits for Natural Gas only: 41.76 lb/hr [(1)] and 0.101 lb/MMBtu [(2)]
Emission Limits for Fuel Oil only: 73.30 lb/hr [(1)] and 0.173 lb/MMBtu [(2)]
Emission Limit for Natural Gas and Fuel Oil Combined: 245 tons/yr [(3)]
Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

[(1)] 3-hour rolling average
[(2)] 3-hour rolling average and based on lower heating value of the fuel
[(3)] 12-month rolling total for turbines Unit 1, Unit 2 and Unit 3 combined

Pollutant: Nitrogen Oxides (NOx)
Emission Limit: 112.2 ppmvd at 15% oxygen (corrected to ISO standard day conditions) on a four-hour rolling basis
Emission Limit: 61.0 ppmvd at 15% oxygen (not corrected to ISO standard day conditions) on a four-hour rolling basis
Authority for Requirement: 40 CFR 60 Subpart GG (§332(a)(1))
567 IAC 23.1(2)"aa"
EPA Approved Alternative Monitoring Dated April 23, 2004 for Units 1 and 2.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limits: 13.35 lb/hr
Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

Pollutant: Carbon Monoxide (CO)
Emission Limits: 113.21 lb/hr, 245 tons/yr [(4)]
Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

[(4)] 12-month rolling total for turbines Unit 1, Unit 2 and Unit 3 combined

Operational Limits & Requirements

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

NSPS Requirements:

These units are subject to regulation outlined in 40 CFR 60 Subpart GG (567 IAC 23.1(2)"aa")

Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

40 CFR 60 Subpart A and Subpart GG are applicable to this equipment. The owner or operator of the equipment shall comply with all the requirements in these NSPS subparts. However, the EPA approved a waiver of specific requirements under 40 CFR 60 Subpart GG on April 23, 2004 (Appendix 2 to this permit) which is incorporated into this permit by reference for Units 1 and 2.

1. The fuel nitrogen content monitoring requirement of 40 CFR Part 60 Subpart GG has been waived by the EPA, provided that the facility does not claim fuel nitrogen credit.
2. The monitoring requirements of natural gas sulfur content may be fulfilled by demonstrating that the fuel meets the definition of natural gas as in 40 CFR 60.334(h)(3).
3. The monitoring requirements of fuel oil sulfur content can be fulfilled by complying with either 40 CFR 60.334(h)(1) and 334(i) or the EPA approved Custom Fuel Monitoring Schedule (Appendix 2).

Authority for Requirement: 40 CFR 60 Subpart GG
567 IAC 23.1(2)"aa"
EPA Approved Waiver of Specific Requirements under 40 CFR 60 Subpart GG Dated April 23, 2004 for Units 1 and 2.

Process throughput:

1. These units shall be fired on natural gas or distillate oil only.
2. The sulfur content of any distillate oil used in these units shall not exceed 0.05% wt.
3. The combined emissions of nitrogen oxides from turbine #1 (Unit 1), turbine #2 (Unit 2) and turbine #3 (Unit3) shall not exceed 245 tons per twelve (12) month rolling period.
4. The combined emissions of carbon monoxide from turbine #1 (Unit 1), turbine #2 (Unit 2), and turbine #3 (Unit3) shall not exceed 245 tons per twelve (12) month rolling period.

Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

5. The sulfur content of any fuel used in these units shall not exceed 0.8% wt.

Authority for Requirement: 40 CFR 60.333(b)
567 IAC 23.1(2)"aa"

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

1. A record of the type and quantity of each fuel used over the previous month shall be recorded at the end of each month.
2. The total quantity of each type of fuel consumed over the previous twelve (12) month period shall be recorded at the end of each month.
3. At the end of each month the twelve (12) month rolling total emissions of nitrogen oxides shall be calculated. This calculation shall be completed using the following formula:

$$ER = (0.101\, lb/mmBTU) * (900\, mmBTU/mmscf) * Qng + (0.173\, lb/mmBTU) * (0.134\, mmBTU/gal) * Qoil$$

Where

$ER = emissions\ of\ NOx\ in\ lb/12\ month\ rolling\ period$

$Qng = Volumetric\ flow\ rate\ of\ natural\ gas\ in\ mmscf/12\ month\ rolling\ period$

$Qoil = Volumetric\ flow\ rate\ of\ distillate\ oil\ in\ gallons/12\ month\ rolling\ period$

The tons of pollutant emitted shall be calculated by:

$$E = ER/2000$$

Where

$E = emissions\ of\ NOx\ in\ tons/12 month\ rolling\ period$

4. At the end of each month the twelve (12) month rolling total emissions of carbon monoxide shall be calculated. This calculation shall be completed using the following formula:

$$ER = (0.111\, lb/mmBTU) * (900\, mmBTU/mmscf) * Qng + (0.037\, lb/mmBTU) * (0.134\, mmBTU/gal) * Qoil$$

Where

$ER = emissions\ of\ CO\ in\ lb/12\ month\ rolling\ period$

$Qng = Volumetric\ flow\ rate\ of\ natural\ gas\ in\ mmscf/12\ month\ rolling\ period$

$Qoil = Volumetric\ flow\ rate\ of\ distillate\ oil\ in\ gallons/12\ month\ rolling\ period$

The tons of pollutant emitted shall be calculated by:

$$E = ER/2000$$

Where

$E = emissions\ of\ CO\ in\ tons/12 month\ rolling\ period$

Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

			Stack Characteristics				
EP	**EU**	**IDNR Construction Permit**	**Height (ft)**	**Discharge Style**	**Opening Diameter (in)**	**Exhaust Temp. (^oF)**	**Exhaust Flowrate (scfm)**
U-1	U-1	03-A-617-S1	45	Vertical Unobstructed	120 (*)	791	247,000
U-2	U-2	03-A-618-S1	45	Vertical Unobstructed	120 (*)	791	247,000
U-3	U-3	06-A-652-S1	46.2	Vertical Unobstructed	120	791	247,000

(*) Construction permits specify 108 inches for each of the two stacks.

Authority for Requirement: Iowa DNR construction permits referenced in the above table

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

Monitoring Requirements

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

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed by – (1)
Test Run Time – 2 hours
Test Method - 40 CFR 51, Appendix M, 201A with 202 (or approved alternative)

Authority for Requirement: Iowa DNR Construction Permits 03-A-617, 03-A-618 & 06-A-652-S1

(1) This test is only required if units U-1, U-2 and U-3 operate on fuel oil for a total of 800 unit hours in any given calendar year. This test must be conducted with the unit(s) operating on fuel oil. A test of either unit U-1, U-2 or U-3 may be taken as representative of the other units.

Pollutant – CO
Stack Test to be Completed by – (1)
Test Run Time – 1 hour
Test Method - 40 CFR 60, Appendix A, Method 10

Authority for Requirement: Iowa DNR Construction Permits 03-A-617, 03-A-618 & 06-A-652-S1

(1) This test is only required if units U-1, U-2 and U-3 operate on fuel oil for a total of 800 unit hours in any given calendar year. This test must be conducted with the unit(s) operating on fuel oil. A test of either unit U-1, U-2 or U-3 may be taken as representative of the other units.

Continuous Emissions Monitoring:
Pollutant - Nitrogen Oxides (NOx) (for ME-1, ME-2 and ME-3)
Operational Specifications - 40 CFR Part75
System Calibration/Quality Assurance (for ME-1) – 5/5/2011
System Calibration/Quality Assurance (for ME-2) – 5/4/2011
System Calibration/Quality Assurance (for ME-3) – 5/4/2011
Ongoing System Calibration/Quality Assurance - 40 CFR Part75
Reporting & Record keeping - 40 CFR Part 75, 40 CFR 60 Subpart GG, 567 IAC 25.1(6)

Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1
40 CFR 60 Subpart GG
567 IAC 23.1(2)"aa"

Other Parameters

Pollutant - Other - Diluent Oxygen (O_2) (for Unit #1, Unit #2 and Unit #3)
Operational Specifications - 40 CFR Part75
System Calibration/Quality Assurance (for Unit #1) – 5/5/2011
System Calibration/Quality Assurance (for Unit #2) – 5/4/2011
System Calibration/Quality Assurance (for Unit #3) – 5/4/2011
Ongoing System Calibration/Quality Assurance - 40 CFR Part75
Reporting & Record keeping - 40 CFR Part 75, 40 CFR 60 Subpart GG, 567 IAC 25.1(6)

Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1
40 CFR 60 Subpart GG
567 IAC 23.1(2)"aa"

Compliance with the nitrogen oxides emission limit of this permit shall be continuously demonstrated by the owner/operator through the use of a CEMS. Therefore, a CEMS shall be installed, calibrated, maintained, and operated for measuring nitrogen oxides emissions in units of the standards discharged to the atmosphere from this unit and the output of the system shall be recorded. The system shall be designed to meet the 40 CFR 75, Appendix A, and Appendix C requirements. Missing data shall be treated according to 40 CFR 75 Appendix C (Section 2. Load-based Procedure for Missing Flow Rate, NOx Concentration, and NOx Emission Rate Data.) The specifications of 40 CFR 75 Appendix B (Quality Assurance/Quality Control) shall apply. If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

Authority for Requirement: Iowa DNR Construction Permits 03-A-617-S1, 03-A-618-S1 & 06-A-652-S1

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: FP-1

Associated Equipment

Associated Emission Unit ID Number: FP-1

Emission Unit vented through this Emission Point: FP-1
Emission Unit Description: Emergency Fire Water Pump
Raw Material/Fuel: Diesel Fuel (Distillate Oil)
Rated Capacity: 200 hp

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: Iowa DNR Construction Permit 08-A-607
[(1)]An exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.54 g/kW hr
Authority for Requirement: Iowa DNR Construction Permit 08-A-607
567 IAC 23.1(2)"yyy"

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 3.5 g/kW hr
Authority for Requirement: Iowa DNR Construction Permit 08-A-607
567 IAC 23.1(2)"yyy"

Pollutant: Non-Methane Hydrocarbons + Nitrogen Oxides (NMHC + NOx)
Emission Limit(s): 10.5 g/kW hr
Authority for Requirement: Iowa DNR Construction Permit 08-A-607
567 IAC 23.1(2)"yyy"

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

Hours of operation:
1. This unit shall not operate more than 500 hours per twelve (12) month rolling period, rolled monthly.
2. The operation of this unit for maintenance checking and readiness testing shall not exceed 100 hours per year.

Process throughput:

1. All fuel used in this unit shall meet the requirement of 40 CFR 60.4207. This standard requires that:

   1) all fuel have either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume and

   2) all fuel have a maximum sulfur content of 500 ppm. Beginning October 1, 2010, the maximum sulfur content requirement changes to a maximum of 15 ppm.

Work practice standards:

1. This unit shall not be operated for reasons other than maintenance checks, readiness testing, and emergency situations.
2. A non-resettable hour meter must be installs to track the number of hours this unit operates.

Reporting & Record keeping:

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

1. At the end of each month, record the number of hours this unit has operated over the previous month.
2. At the end of each month, record the number of hours this unit has operated over the previous twelve (12) months.
3. A log of the operation of this unit shall be maintained. This log shall contain the time operation of the unit as well as the reason the unit was operated.
4. Records of the compliance demonstration shall be kept onsite.

NSPS / NESHAP

1. This unit is subject to the requirements of the New Source Performance Standard (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII; 567 IAC 23.1(2)"yyy").

   Authority for Requirement: Iowa DNR Construction Permit 08-A-607

2. This facility has equipment of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

   Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ.

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

Stack Height, (ft, from the ground): 13
Stack Opening, (inches, dia.): 5
Exhaust Flow Rate (scfm): 952
Exhaust Temperature (°F): 988
Discharge Style: Horizontal
Authority for Requirement: Iowa DNR Construction Permit 08-A-607

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

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, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. 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 following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
    a. Form 1.0 "Facility Identification";
    b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
    c. Form 5.0 "Title V annual emissions summary/fee"; and
    d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
    a. Form 1.0 "Facility Identification";
    b. Form 5.0 "Title V annual emissions summary/fee";
    c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

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

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

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

G8. Duty to Provide Information

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

G9. General Maintenance and Repair Duties

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

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

G10. Recordkeeping Requirements for Compliance Monitoring

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

Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

G13. Hazardous Release

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

G14. Excess Emissions and Excess Emissions Reporting Requirements

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

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

2. Excess Emissions Reporting

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

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

ii. The estimated quantity of the excess emission.

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

iv. The cause of the excess emission.

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

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

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

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

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

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

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

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

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

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

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

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

G15. Permit Deviation Reporting Requirements

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

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

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

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

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

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

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

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

d. The changes are not subject to any requirement under Title IV of the Act.

e. The changes comply with all applicable requirements.

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

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

ii. The date on which the change will occur,

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

iv. The pollutants emitted subject to the emissions trade

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

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

vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

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

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

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

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

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

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

i. Correct typographical errors

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

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

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

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

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

2. Minor Permit Modification.

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

i. Do not violate any applicable requirements

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

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

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

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

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

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

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

ii. The permittee's suggested draft permit

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

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

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

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

renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

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

G20. Asbestos

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

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 <u>except</u> 23.2(3)"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 substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82.*

G24. Permit Reopenings

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

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

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

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

G25. Permit Shield

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

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

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

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

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

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

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

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

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

G26. Severability

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

G27. Property Rights

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

G28. Transferability

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

G29. Disclaimer

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

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

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance. Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 242-6001

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

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

G31. Prevention of Air Pollution Emergency Episodes

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

G32. Contacts List

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

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

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

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 242-5100

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

Field Office 1 909 West Main – Suite 4 Manchester, IA 52057 (563) 927-2640	**Field Office 2** 2300-15th St., SW Mason City, IA 50401 (641) 424-4073
Field Office 3 1900 N. Grand Ave. Spencer, IA 51301 (712) 262-4177	**Field Office 4** 1401 Sunnyside Lane Atlantic, IA 50022 (712) 243-1934
Field Office 5 401 SW 7th Street, Suite I Des Moines, IA 50309 (515) 725-0268	**Field Office 6** 1023 West Madison Street Washington, 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 Dept.** Air Quality Branch 501 13th St., NW Cedar Rapids, IA 52405 (319) 892-6000

V. Appendix 1: 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines

(As revised on February 24, 2006)

§ 60.330 Applicability and designation of affected facility.
(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.
(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of §60.332.

§ 60.331 Definitions.
As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.
(a) *Stationary gas turbine* means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.
(b) *Simple cycle gas turbine* means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.
(c) *Regenerative cycle gas turbine* means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine.
(d) *Combined cycle gas turbine* means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.
(e) *Emergency gas turbine* means any stationary gas turbine which operates as a mechanical or electrical power source only when the primary power source for a facility has been rendered inoperable by an emergency situation.
(f) *Ice fog* means an atmospheric suspension of highly reflective ice crystals.
(g) *ISO standard day conditions* means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.
(h) *Efficiency* means the gas turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output based on the lower heating value of the fuel.
(i) *Peak load* means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.
(j) *Base load* means the load level at which a gas turbine is normally operated.
(k) *Fire-fighting turbine* means any stationary gas turbine that is used solely to pump water for extinguishing fires.
(l) *Turbines employed in oil/gas production or oil/gas transportation* means any stationary gas turbine used to provide power to extract crude oil/natural gas from the earth or to move crude oil/natural gas, or products refined from these substances through pipelines.
(m) A *Metropolitan Statistical Area* or *MSA* as defined by the Department of Commerce.
(n) *Offshore platform gas turbines* means any stationary gas turbine located on a platform in an ocean.
(o) *Garrison facility* means any permanent military installation.

(p) *Gas turbine model* means a group of gas turbines having the same nominal air flow, combuster inlet pressure, combuster inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.
(q) *Electric utility stationary gas turbine* means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.
(r) *Emergency fuel* is a fuel fired by a gas turbine only during circumstances, such as natural gas supply curtailment or breakdown of delivery system, that make it impossible to fire natural gas in the gas turbine.
(s) *Unit operating hour* means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.
(t) *Excess emissions* means a specified averaging period over which either:
(1) The NOx emissions are higher than the applicable emission limit in §60.332;
(2) The total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in §60.333; or
(3) The recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.
(u) *Natural gas* means a naturally occurring fluid mixture of hydrocarbons (*e.g.*, methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.
(v) *Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, *etc.*, to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.
(w) *Lean premix stationary combustion turbine* means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture for combustion in the combustor. Mixing may occur before or in the combustion chamber. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
(x) *Diffusion flame stationary combustion turbine* means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
(y) *Unit operating day* means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

§ 60.332 Standard for nitrogen oxides.

(a) On and after the date on which the performance test required by §60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of this section.

(1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NOx emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NOx emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(3) The use of F in paragraphs (a)(1) and (2) of this section is optional. That is, the owner or operator may choose to apply a NOx allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a)(4) of this section or may accept an F-value of zero.

(4) If the owner or operator elects to apply a NOx emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under §60.8 as follows:

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
$N \leq 0.015$ ……	0
$0.015 < N \leq 0.1$ ……	0.04 (N)
$0.1 < N \leq 0.25$ ……..	0.004 + 0.0067 (N - 0.1)
$N > 0.25$ ……	0.005

Where:

N = the nitrogen content of the fuel (percent by weight).

or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data

and must be approved for use by the Administrator before the initial performance test required by §60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register.
(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.
(c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.
(d) Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in §60.332(b) shall comply with paragraph (a)(2) of this section.
(e) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph (a) of this section.
(f) Stationary gas turbines using water or steam injection for control of NOx emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.
(g) Emergency gas turbines, military gas turbines for use in other than a garrison facility, military gas turbines installed for use as military training facilities, and fire fighting gas turbines are exempt from paragraph (a) of this section.
(h) Stationary gas turbines engaged by manufacturers in research and development of equipment for both gas turbine emission control techniques and gas turbine efficiency improvements are exempt from paragraph (a) on a case-by-case basis as determined by the Administrator.
(i) Exemptions from the requirements of paragraph (a) of this section will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.
(j) Stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour that commenced construction, modification, or reconstruction between the dates of October 3, 1977, and January 27, 1982, and were required in the September 10, 1979, Federal Register (44 FR 52792) to comply with paragraph (a)(1) of this section, except electric utility stationary gas turbines, are exempt from paragraph (a) of this section.
(k) Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph (a)(2) of this section when being fired with an emergency fuel.
(l) Regenerative cycle gas turbines with a heat input less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) are exempt from paragraph (a) of this section.

§ 60.333 Standard for sulfur dioxide.
On and after the date on which the performance test required to be conducted by §60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:
(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.
(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

§ 60.334 Monitoring of operations.

(a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control NOx emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.

(b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NOx emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NOx and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NOx concentrations to 15 percent O2 by either converting the CO2 hourly averages to equivalent O2 concentrations using Equation F–14a or F–14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O2, or by using the CO2 readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows:

(1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NOx and diluent monitors may be performed individually or on a combined basis, *i.e.*, the relative accuracy tests of the CEMS may be performed either:

(i) On a ppm basis (for NOx) and a percent O2 basis for oxygen; or

(ii) On a ppm at 15 percent O2 basis; or

(iii) On a ppm basis (for NOx) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the NOx data to 15 percent O2).

(2) As specified in §60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.

(3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in §60.13(h).

(i) For each unit operating hour in which a valid hourly average, as described in paragraph (b)(2) of this section, is obtained for both NOx and diluent, the data acquisition and handling system must calculate and record the hourly NOx emissions in the units of the applicable NOx emission standard under §60.332(a), *i.e.*, percent NOx by volume, dry basis, corrected to 15 percent O2 and International Organization for Standardization (ISO) standard conditions (if required as given in §60.335(b)(1)). For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2, a diluent cap value of 19.0 percent O2 may be used in the emission calculations.

(ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (Ho), minimum ambient temperature (Ta), and minimum combustor inlet absolute pressure (Po) into the ISO correction equation.

(iii) If the owner or operator has installed a NOx CEMS to meet the requirements of part 75 of this chapter, and is continuing to meet the ongoing requirements of part 75 of this chapter, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions.

Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in §60.7(c).
(c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NOx emissions, the owner or operator may, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA or local permitting authority approval of a petition for an alternative procedure of continuously monitoring compliance with the applicable NOx emission limit under §60.332, that approved procedure may continue to be used, even if it deviates from paragraph (a) of this section.
(d) The owner or operator of any new turbine constructed after July 8, 2004, and which uses water or steam injection to control NOx emissions may elect to use either the requirements in paragraph (a) of this section for continuous water or steam to fuel ratio monitoring or may use a NOx CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section.
(e) The owner or operator of any new turbine that commences construction after July 8, 2004, and which does not use water or steam injection to control NOx emissions may elect to use a NOx CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section. An acceptable alternative to installing a CEMS is described in paragraph (f) of this section.
(f) The owner or operator of a new turbine who elects not to install a CEMS under paragraph (e) of this section, may instead perform continuous parameter monitoring as follows:
(1) For a diffusion flame turbine without add-on selective catalytic reduction controls (SCR), the owner or operator shall define at least four parameters indicative of the unit's NOx formation characteristics and shall monitor these parameters continuously.
(2) For any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in the lean premixed (low-NOx) combustion mode.
(3) For any turbine that uses SCR to reduce NOx emissions, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.
(4) For affected units that are also regulated under part 75 of this chapter, if the owner or operator elects to monitor NOx emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in §75.19 of this chapter, the requirements of this paragraph (f) may be met by performing the parametric monitoring described in section 2.3 of appendix E or in §75.19(c)(1)(iv)(H) of this chapter.
(g) The steam or water to fuel ratio or other parameters that are continuously monitored as described in paragraphs (a), (d) or (f) of this section shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in §75.19 of this chapter or the NOx emission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in §75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.

(h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:
(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in §60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084–82, 94, D5504–01, D6228–98, or Gas Processors Association Standard 2377–86 (all of which are incorporated by reference-see §60.17), which measure the major sulfur compounds may be used; and
(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (*i.e.*, if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332). The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.
(3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.
(4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.
(i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:
(1) *Fuel oil.* For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (*i.e.*, flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.
(2) *Gaseous fuel.* Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in paragraph (h)(3) of this section, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.
(3) *Custom schedules.* Notwithstanding the requirements of paragraph (i)(2) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (i)(3)(i) and (i)(3)(ii) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.333.
(i) The two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of this section are acceptable, without prior Administrative approval:

(A) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (i)(3)(i)(B), (C), or (D) of this section, as applicable.
(B) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in paragraph (i)(3)(i)(C) of this section. If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section.
(C) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then:
(*1*) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(*2*) of this section.
(*2*) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(*3*) of this section.
(*3*) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, continue to monitor at this frequency.
(D) If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring according to paragraph (i)(3)(i)(A) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of paragraph (i)(3)(i)(B) or (C) of this section shall be followed.
(ii) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:
(A) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf (*i.e.*, the maximum total sulfur content of natural gas as defined in §60.331(u)), no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.
(B) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals.
(C) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(C) of this section.
(D) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(D) of this section.
(j) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
(1) Nitrogen oxides.
(i) For turbines using water or steam to fuel ratio monitoring:

(A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with §60.332, as established during the performance test required in §60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.
(B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.
(C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).
(ii) If the owner or operator elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in paragraphs (j)(1)(ii)(A) and (B) of this section.
(A) An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in §60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.
(B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.
(iii) For turbines using NOx and diluent CEMS:
(A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NOx concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NOx concentration" is the arithmetic average of the average NOx concentration measured by the CEMS for a given hour (corrected to 15 percent O2 and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NOx concentrations immediately preceding that unit operating hour.
(B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NOx concentration or diluent (or both).
(C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).
(iv) For turbines required under paragraph (f) of this section to monitor combustion parameters or parameters that document proper operation of the NOx emission controls:
(A) An excess emission shall be a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.
(B) A period of monitor downtime shall be a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

(2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:
(i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
(ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.
(iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.
(3) *Ice fog.* Each period during which an exemption provided in §60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.
(4) *Emergency fuel.* Each period during which an exemption provided in §60.332(k) is in effect shall be included in the report required in §60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.
(5) All reports required under §60.7(c) shall be postmarked by the 30th day following the end of each calendar quarter.

§ 60.335 Test methods and procedures.
(a) The owner or operator shall conduct the performance tests required in §60.8, using either
(1) EPA Method 20,
(2) ASTM D6522–00 (incorporated by reference, see §60.17), or
(3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NOx and diluent concentration.
(4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.
(5) Notwithstanding paragraph (a)(4) of this section, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:
(i) You may perform a stratification test for NOx and diluent pursuant to
(A) [Reserved]
(B) The procedures specified in section 6.5.6.1(a) through (e) appendix A to part 75 of this chapter.
(ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:

(A) If each of the individual traverse point NOx concentrations, normalized to 15 percent O2, is within ±10 percent of the mean normalized concentration for all traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the measurement line that exhibited the highest average normalized NOx concentration during the stratification test; or
(B) If each of the individual traverse point NOx concentrations, normalized to 15 percent O2, is within ±5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.
(6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.
(b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in §60.332 and shall meet the performance test requirements of §60.8 as follows:
(1) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{XO}) corrected to 15 percent O_2 shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices:

$$NOx = (NOxo)(Pr / Po)^{0.5} e^{19(Ho-0.0063)} (288^{0}K / Ta)^{1.53}$$

Where:
NOx = emission concentration of NOx at 15 percent O2 and ISO standard ambient conditions, ppm by volume, dry basis,
NOxo = mean observed NOx concentration, ppm by volume, dry basis, at 15 percent O2,
Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg,
Po = observed combustor inlet absolute pressure at test, mm Hg,
Ho = observed humidity of ambient air, g H_2O/g air,
e = transcendental constant, 2.718, and
Ta = ambient temperature, °K.
(2) The 3-run performance test required by §60.8 must be performed within ±5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in §60.331).
(3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NOx emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable NOx emission limit in §60.332 for the combustion turbine must still be met.
(4) If water or steam injection is used to control NOx with no additional post-combustion NOx control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with §60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522–00 (incorporated by reference, see §60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.332 NOx emission limit.

(5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in §60.332, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed, following the applicable procedures described in §60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water (or steam) to fuel ratio will be valid.
(6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this section) or as part of the initial performance test of the affected unit.
(7) If the owner or operator elects to install and certify a NOx CEMS under §60.334(e), then the initial performance test required under §60.8 may be done in the following alternative manner:
(i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.
(ii) Use the test data both to demonstrate compliance with the applicable NOx emission limit under §60.332 and to provide the required reference method data for the RATA of the CEMS described under §60.334(b).
(iii) The requirement to test at three additional load levels is waived.
(8) If the owner or operator is required under §60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NOx emission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.334(g).
(9) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the owner or operator may use equipment and procedures meeting the requirements of:
(i) For liquid fuels, ASTM D2597–94 (Reapproved 1999), D6366–99, D4629–02, D5762–02 (all of which are incorporated by reference, *see* §60.17); or
(ii) For gaseous fuels, shall use analytical methods and procedures that are accurate to within 5 percent of the instrument range and are approved by the Administrator.
(10) If the owner or operator is required under §60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:
(i) For liquid fuels, ASTM D129–00, D2622–98, D4294–02, D1266–98, D5453–00 or D1552–01 (all of which are incorporated by reference, *see* §60.17); or
(ii) For gaseous fuels, ASTM D1072–80, 90 (Reapproved 1994); D3246–81, 92, 96; D4468–85 (Reapproved 2000); or D6667–01 (all of which are incorporated by reference, see §60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.
(11) The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.
(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
(1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in §60.8 to ISO standard day conditions.

VI. Appendix 2: EPA Approved Waiver of Specific Requirements under 40 CFR 60 Subpart GG

05-04-002
CWD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

APR 23 2004

Raymond J. Wahle
Director, Power Supply and Operations
Missouri River Energy Services
3725 West Avera Drive
P.O. Box 88920
Sioux Falls, SD 57109-8920

RE: Missouri River Energy Services Request for Waiver of Specified Requirements Under 40 CFR 60 Subpart GG. Western Minnesota Municipal Power Agency, Exira Station in Brayton, Iowa, Air Quality Permits Numbers 03-A-617 and 03-A-618

Dear Mr. Wahle:

On March 2, 2004, Missouri River Energy Services, Western Minnesota Municipal Power Agency (WMMPA), Exira Station in Brayton, Iowa, (Exira) requested relief from several monitoring and testing requirements under the New Source Performance Standards, Subparts GG for two LM 6000 simple cycle turbines located at the Exira plant.

Exira operates two GE LM6000 simple cycle combustion turbines which are rated nominally at 45 MWe (gross) each. Each turbine is a stand alone system. Each turbine may operate unlimited hours on natural gas, less than 800 hours in any calender year on #2 fuel oil with a sulfur content less than 0.05%$_w$.

In brief, Exira requested:

1) a waiver from the Subpart GG requirement to determine gaseous fuel sulfur content on a daily basis;

2) a waiver from the Subpart GG requirement to determine the fuel-bound nitrogen content of oil or gaseous fuels;

3) a waiver from the requirement to demonstrate initial compliance of SO2 emissions according to Method 20 as described in Subpart GG;

4) a waiver from the requirement to demonstrate initial compliance of NO_x emissions while operating on oil as required under Subpart GG;

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5) a waiver from the requirement to demonstrate initial compliance of NOx emissions at the four load points by 40 CFR 60.335 (c)(2) and (3); and

6) a waiver from the requirement to use Method 20 for the initial Subpart GG tests and instead use Method 7E for the reference method.

Your request for 1 above is hereby approved for reduced fuel sampling for natural gas and very low sulfur oil containing 0.05% sulfur or less. Your request for 2 above is hereby granted as long as you agree not to use the fuel-bound nitrogen credit in Subpart GG. Your request for 3 above is hereby granted as long as only natural gas, pipeline natural gas and very low sulfur oil containing 0.05% sulfur or less. Your request for 4 above is hereby granted as long as the facility remains consistent with the requirements below. Your request for 5 above is hereby granted. Your request for 6 above is hereby granted. All of these above 6 waivers are contingent upon the source remaining consistent with those requirements below and Appendix A.

Custom Fuel Monitoring Schedule

NSPS Subpart GG requires the owner or operator of any stationary gas turbine to monitor the sulfur and nitrogen content of all fuels fired in the turbine. For bulk storage fuels, sampling and analysis occurs each time new fuel is added to the storage tank. For fuels without bulk storage, sampling and analysis is required daily. Nitrogen sampling under NSPS Subpart GG is designed to measure the fuel-bound nitrogen content which can then be used to make an upward adjustment to NO_x emission limitation. For sources that do not seek to use the fuel-bound nitrogen credit, it is unnecessary to perform rigorous sampling and analysis to determine the daily fuel-nitrogen concentrations. Because the NO_x emission limitations in the permit are much more conservative than those in Subpart GG, Missouri River Energy Services, Exira Station suggests that it is unlikely that they will want or need to make use of the fuel-bound nitrogen credit to demonstrate compliance with NSPS Subpart GG. As a result, it is unnecessary at this time to require any nitrogen sampling of the natural gas or fuel oil.

Under the approved permit, Missouri River Energy Services, Exira Station is allowed to burn pipeline grade natural gas in all the turbine units along with limited quantities of very low sulfur fuel oil. The turbines will be subject to the Part 75 acid rain program monitoring requirements and must install the appropriate equipment to measure and account for all SO_2 and NO_x emissions. Under Part 75, a turbine may elect to use fuel measurement along with sampling and analysis to quantify SO_2 emissions in lieu of a CEMS. These procedures, found in 40 CFR Part 75, Appendix D, establish quality assurance specification for the fuel measurement devices along with a schedule for sampling and analyzing various fuels. In general, these procedures, taken together, create a record that is sufficient to document whether a source is in compliance with the fuel sulfur specifications under Subpart GG.

For specific details on the custom fuel schedule approved for the Missouri River Energy Services, Exira Station, see Appendix A.

Variance From Specified Subpart GG Testing Points & Initial Demonstration of Compliance with NSPS Subpart GG

Under 40 CFR §60 8(a), an affected source must demonstrate initial compliance with the applicable emission limitations within 60 days after achieving the maximum production rate but in no case later than 180 days after initial startup. Turbines subject to NSPS Subpart GG must demonstrate initial compliance within the time line above using Reference Method 20. In brief, Subpart GG requires each owner or operator to perform the reference method at four generating loads to adequately characterize the emissions over the full range of operation. Simultaneously, the affected source is required to record information on the water-to-fuel ratio, using the equipment specified in 40 CFR §60.334(a), to create a parametric curve that is then used as an indicator that turbine NO_x emissions are within a range similar to those documented during the initial performance test.

Missouri River Energy Services, Exira Station will install and operate a Part 75 NO_x CEMS on each turbine. The testing procedures to certify the CEMS are nearly identical to those used for Reference Method 20, except that the CEMS performance is demonstrated at only one load level. Based on prior determinations made by Region 7 and other EPA regions, we have concluded consistent with 40 CFR §60.8(b)(4), that the Reference Method 20 tests at four different loads may be waived on the premise that data collected during the Part 75 CEMS performance tests are sufficient for the purpose of demonstrating initial compliance with the NSPS Subpart GG requirements. Further, since a certified CEMS can provide quality assured emissions data over the whole range of turbine operations, it is not necessary for an affected unit to conduct Subpart GG performance tests at the four operating loads specified in NSPS Subpart GG. Additionally, since part 75 utilizes Method 7E reference method for the certification tests, Method 7E is appropriate in lieu of Method 20.

To address concerns about the potential for emission stratification in the stack -- inherent with turbines and recognized in the Reference Method 20 sampling protocol -- Region 7 requires a stratification analysis to assure that any sampling occurs at locations in the stack that result in the highest NO_x readings. The stratification analysis is consistent with the sampling requirements recently promulgated in Part 75, Appendix A. For specific details on how to demonstrate initial compliance with NSPS Subpart GG using the NO_x CEMS, see Appendix A.

Ongoing Demonstration of Compliance with NSPS Subpart GG

Under NSPS Subpart GG, §60.334(a), any affected unit with a water injection system is required to install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. When subsequent measurements are compared to the water-to-fuel curve developed during the initial performance

test, the source and air pollution control agencies can use the data to determine whether a turbine continues to operate under the same performance conditions as those documented during the initial and any subsequent compliance tests; thus indicating ongoing compliance with the NO_x standard. Any deviations from the parameter ranges established during the initial performance test form the basis for excess emission reporting under 60.334(c)(1).

By using a NO_x CEMS, certified in accordance with 40 CFR Part 75, in lieu of parameter measurements, Missouri River Energy Services, Exira Station will be able to directly compare the measured NO_x data against the Subpart GG standard. Because of the rigorous quality assurance and quality control standards under Part 75, the NO_x CEMS data serve as evidence of direct compliance with the Subpart GG standard over all operating ranges. Since the NO_x CEMS is expected to provide direct, relevant emissions data, it is hereby approved, pursuant to §60.13(i), as an alternative monitoring system to the Subpart GG parametric monitoring system. For the purpose of excess emission reporting, Missouri River Energy Services, Exira Station will use ISO-corrected NO_x concentration information reported by the CEMS.

For specific details on how to use the CEMS to report excess emissions for the purpose of NSPS Subpart GG, see Appendix A.

General Disclaimer

This approval does not change or otherwise supercede any conditions prescribed in any permit issued by the Iowa Department of Natural Resources (IDNR). To the extent this test waiver and alternative monitoring approval is incompatible or conflicts with any of the permits issued by IDNR, we recommend that you work with the state agency either to modify the permit accordingly or seek assurance that this agreement is an acceptable alternative to the testing and monitoring conditions found in the permit.

If you have any questions concerning the details of this approval, please contact Scott Postma at 913-551-7048.

Sincerely,

JoAnn M. Heiman
Acting Chief
Air Permitting and Compliance Branch

cc: Dave Phelps
Iowa Department of Natural resources

Appendix A

Approval of Alternative Monitoring and Test Waiver for
Missouri River Energy Services, Exira Station
While Operating in Simple Cycle Mode

Custom Fuel Monitoring Schedule

Sulfur Monitoring... while operating on natural gas

Pursuant to 40 CFR §60.13(i), EPA Region 7 approves the sampling and analysis procedures found in 40 CFR Part 75, Appendix D, Sections 2.3.1.4, 2.3.2.4, and 2.3.3.1 as an alternative to the natural gas monitoring and sulfur fuel sampling and analysis requirements of NSPS Subpart GG, subject to the following conditions:

1) Missouri River Energy Services, Exira shall submit an excess emissions report to the Iowa Department of Natural Resources consistent with the format and schedule described in 40 CFR §60.7(d).

Consistent with prior custom fuel monitoring schedule approvals found on EPA's Applicability Determinations Index [see http://cfpub.epa.gov/adi/], Missouri River Energy Services, Exira Station may, at its option, also use the length of stain tube method (GPA Standard 2377-86) for the purpose of demonstrating that the sulfur content of the fuel is below the NSPS Subpart GG limit of 0.8%$_w$.

Sulfur Monitoring... while operating on very low sulfur distillate oil

Pursuant to 40 CFR §60.13(i), EPA Region 7 approves any of the sampling and analysis procedures found in 40 CFR Part 75, Appendix D, Section 2.2 as an alternative to the fuel oil monitoring and sulfur fuel sampling and analysis requirements of NSPS Subpart GG.

Sulfur... Excess Emission Reporting

Missouri River Energy Services, Exira Station shall submit an excess emissions report to the Iowa Department of Natural resources (IDNR) consistent with the format and schedule described in 40 CFR §60.7(d). Since sulfur emissions from both the pipeline grade natural gas and low sulfur diesel fuel are expected to be at least an order of magnitude less than the NSPS Subpart GG fuel sulfur standards, Missouri River Energy Services, Exira Station may submit the streamlined excess emission report provided for in §60.7(c)(4) and §60.7(d)(1).

Nitrogen Monitoring

Pursuant to 40 CFR §60.13(i), Missouri River Energy Services, Exira Station shall not be required to sample the nitrogen content of the fuel, as long as the following conditions are met:

1) As described in its February 25, 2004, request, Missouri River Energy Services, Exira Station agrees to accept a value of zero ("0") for the fuel-bound nitrogen credit. As a result, no nitrogen sampling and analysis of the fuel is required.

2) If Missouri River Energy Services, Exira Station seeks credit for fuel-bound nitrogen at some future time, then they shall sample and analyze the nitrogen concentration in the fuel each day. However, this approval in no way limits Missouri River Energy Services, Exira Station's opportunity to pursue EPA approval of a custom fuel schedule for a reduced nitrogen sampling and analysis frequency under 40 CFR §60.334(b)(2) at that time.

3) For your protection and as a courtesy to the agency responsible for reviewing the excess emission reports, we suggest that Missouri River Energy Services, Exira Station add a statement to each report reaffirming that no nitrogen sampling was performed pursuant to the agreement described herein.

Initial Demonstration of Compliance with NSPS Subpart GG

Pursuant to 40 CFR §60.8(b)(4) and subject to the following conditions, Region 7 hereby waives the Reference Method 20 test required by NSPS Subpart GG. In its place, Missouri River Energy Services, Exira Station may substitute the Part 75 NO_x and diluent CEMS certification procedures for the purpose of demonstrating initial compliance with NSPS Subparts GG.

1) Missouri River Energy Services, Exira Station shall successfully complete the Part 75 NO_x and diluent CEMS certification tests so that the data are, at a minimum, conditionally certified prior to the testing deadlines outlined in 40 CFR §60.8(a) or Part 75, whichever date is earlier.

2) Prior to the start of Part 75 CEM certification testing, Missouri River Energy Services, Exira Station shall perform a stratification test for NO_x and diluent pursuant to the procedures specified in 40 CFR Part 75, Appendix A, Section 6.5.6.1(a) through (e). Once the stratification sampling is completed, Missouri River Energy Services, Exira Station shall analyze the data using the procedures in Section 6.5.6.3 (a) and (c) to determine if subsequent RATA testing will occur along a short or long reference method measurement line. The short or long reference method measurement line, as determined above, will serve in lieu of the sampling points usually required by Reference Method 20. In no case shall the RATA be based on fewer than three sample points as specified in 40 CFR Part 60, Appendix B, Performance Specification 2, Section 3.2.

3) Reference method data collected during the Part 75 CEMS certification testing, or certified data collected by the CEMS subsequent to the RATA may be used to demonstrate initial compliance with the Subpart GG NO_x emission limitation. These data shall be ISO-corrected for the purpose of demonstrating initial compliance.

4) The permits issued to the Missouri River Energy Services, Exira Station limits each simple cycle turbine to the use of only pipeline grade natural gas or very low sulfur fuel oil (<0.05%$_w$ sulfur), the SO_2 measurement requirements under 40 CFR Part 60, Appendix A, Reference Method 20, Section 6.3 are waived pursuant to 40 CFR §60.8(b)(4).

5) Initial compliance with NSPS Subpart GG shall be demonstrated for each turbine in accordance with the deadlines described in 40 CFR §60.8(a). Each turbine and associated fuel type will have its own demonstration period (e.g. Unit 1-gas, Unit 1-oil), each period commencing when the primary or backup fuel is first fired.

Ongoing Demonstration of Compliance with NSPS Subpart GG

Pursuant to 40 CFR §60.13(i), EPA hereby approves the use of a NO_x CEMS in lieu of the water-to-fuel monitoring system, subject to the following conditions:

1) Missouri River Energy Services, Exira Station shall install, operate, maintain, and quality assure a NO_x and diluent CEMS, pursuant to 40 CFR Part 75, for each turbine.

2) Missouri River Energy Services, Exira Station shall calculate and record an ISO-corrected NO_x emission rate each hour using the equation in 40 CFR §60.335(c)(1). If CO_2 is used as the diluent, then the NO_x concentration shall be corrected to an O_2 basis using the appropriate equations in 40 CFR Part 60, Appendix A, Reference Method 20, Section 7.

3) As an alternative to calculating and recording an ISO-corrected NO_x emission rate for each hour, Missouri River Energy Services, Exira Station may perform a "worst case" ISO calculation, using the equation in §60.335(c)(1) to back calculate an observed NO_x concentration (NO_{xo}) at which the corresponding ISO corrected NO_x rate (NO_x) would exceed the Subpart GG standard. For the purpose of this calculation, Missouri River Energy Services, Exira Station should substitute the maximum humidity of ambient air (H_o), minimum ambient temperature (T_a), and minimum combustor inlet absolute pressure (P_o) into the ISO adjustment equation.

4) Missouri River Energy Services, Exira Station shall submit an excess emissions report to the IDNR Air Program consistent with the content found in 40 CFR §60.334(c) and the format and schedule described in 40 CFR §60.7(d). In place of §60.334(c)(1), Missouri River Energy Services, Exira Station shall report each period during which 1) the ISO-

corrected NO_x data exceed the applicable NSPS Subpart GG NO_x emission limitation if Paragraph 2 above is used, or 2) the diluent-corrected NOx concentration data exceed the "worst case" non-ISO corrected NO_x concentration if Paragraph 3 above is used. The excess emissions analysis shall be based on Part 75 "bias corrected" NO_x and diluent concentration data, averaged over each 3-hour period (arithmetic average of three contiguous one hour periods), but shall exclude any data substituted by the Part 75 "missing data" routines.

[End of Conditions]

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Telephone: 605/338-4042

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05-04-002
CWD

February 25, 2004

Ms. Joann Heiman
Branch Chief of Air Permitting and Compliance
EPA Region 7
901 North 5th Street
Kansas City, KS 66101

Re: Request for Waiver of Specified Requirements Under 40 CFR 60 Subpart GG. WMMPA Exira Station IDNR Air Quality Permit Numbers 03-A-617 and 03-A-618

The Exira Station, located in Brayton, Iowa, is nearing the completion of the construction of the combustion turbine units authorized by the Iowa Department of Natural Resources (IDNR) Air Quality Construction Permits 03-A-617 and 03-A-618 (air quality permits) issued June 20, 2003. Emissions compliance and continuous emissions monitoring system certification tests are tentatively scheduled for the week of April 19, 2004. Western Minnesota Municipal Power Agency (WMMPA) is submitting this letter to request approval of alternatives for initial compliance testing and fuel monitoring for the two LM6000 generating units, nominally rated at 45 MW each, that will be primarily used for peaking purposes. Because the affected emissions units at the Exira Station are subject to somewhat overlapping compliance requirements under the air quality permits, the New Source Performance Standards under 40 CFR 60 Subpart GG, and the Acid Rain Program under 40 CFR 75, WMMPA respectfully requests that EPA Region 7 authorize the alternative provisions and waivers for the Exira Station listed below. Based on the WMMPA inquiries with EPA Region 7, WMMPA is of the understanding that similar requests for alternative provisions and waivers of the requirements of 40 CFR 60 Subpart GG have been granted in Region 7 in the past.

Fuel Monitoring

Pursuant to the fuel monitoring requirements under 40 CFR 60.334(b) and 335(e), WMMPA requests the following:

1. A waiver from the requirement to determine gaseous fuel sulfur content on a daily basis.
   - Proposed Alternative
     - Gaseous fuel sulfur content will be monitored and demonstrated pursuant to the requirements of 40 CFR 75 Appendix D Section 2.3.1.4 (for pipeline natural gas) or 2.3.2.4 (for natural gas).

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Fuel used at the Exira Station will be demonstrated to meet the definitions of pipeline natural gas or natural gas in 40 CFR 72.2.

2. A waiver from the requirement to determine the fuel-bound nitrogen content of oil or gaseous fuels.
   - Proposal Alternative
     - The combustion turbine units will be equipped with a CEMS that will measure and record NO_x and O_2 exhaust emissions over the range of operation on either oil or gas. The CEMS will be certified and maintained according to the performance specifications of 40 CFR 75 Appendix A and B.
     - Additionally, WMMPA intends to demonstrate compliance with the NO_x standard without using the allowance for fuel-bound nitrogen provided in 40 CFR 60.332.

Initial Compliance Demonstration

Pursuant to the requirements of Test Methods and Procedures under 40 CFR 60.335 and the Performance Tests under 40 CFR 60.8, WMMPA requests the following:

1. A waiver from the requirement to demonstrate initial compliance of SO_2 emissions according to Method 20 as described under 40 CFR 60.335(c)(3).
   - Proposed Alternative
     - The standards for sulfur dioxide emissions will be determined through fuel monitoring as described above and in 40 CFR 60.334.
2. A waiver from the requirement to demonstrate initial compliance of NO_x emissions while operating on oil as described under 40 CFR60.335(c).
   - Proposed Alternative
     - Oil will only be used as a backup source of fuel at the Exira Station. Pursuant to the air quality permits, compliance testing must be performed on one of the units if Unit 1 and Unit 2 operate on oil for a total of 800 hours or more during any calendar year. If Unit 1 and Unit 2 operate for a total of 800 hours or more in any calendar year, oil testing on one of the units will be performed. Additionally, each unit will be equipped with a certified CEMS capable of monitoring and recording NO_x and O_2 emissions while burning oil.
3. A waiver from the requirement to demonstrate initial compliance of NO_x emissions at the four load points specified by 40 CFR60.335(c)(2) and (3).
   - Proposed Alternative
     - Pursuant to the requirements of the air quality permits, NO_x emissions compliance will be demonstrated for each unit firing gas at or near base load utilizing either Method 20 or Method 7E results during the relative accuracy test audit for the 40 CFR 75

CEMS certification. Therefore, the NO_x standard will be demonstrated from the average of 9 to 12 test runs of at least 21 minutes each.

Rather than performing emissions testing at three additional loads, each combustion turbine unit will be equipped with a NO_x and O_2 CEMS, certified and maintained according to the performance specifications of 40 CFR 75 Appendix A and B, capable of making valid measurements over the range of operation.

WMMPA is currently in the process of drafting a test protocol for an appropriate test program, and will soon be forwarding the protocol to IDNR for approval. Based on these plans, and the planned testing schedule of April 19, 2004, WMMPA would appreciate your expeditious review and reply to this request.

If you have any questions, please call me at (605) 330-6963.

Sincerely,

Raymond J. Wahle
Director, Power Supply and Operations
Missouri River Energy Services

c: D. Keegel, MRES
L. Crowser, MRES
IDNR
TRC Environmental
Ivan Clark, R.W. Beck
Brian Nelson, R.W. Beck

VII. Appendix 3: 40 CFR Part 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

.. (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

.. (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

Table 4 (in part) to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

(in g/KW-hr (g/HP-hr))

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+[3]	4.0 (3.0)		0.20 (0.15)

[3]In model years 2009–2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

VIII. Appendix 4: 40 CFR Part 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

This facility has equipment of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

Web Address:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div6&view=text&node=40:13.0.1.1.1.1&idno=40

IX. Appendix 5: Acid Rain Phase II Permits

AIR QUALITY BUREAU
7900 Hickman Rd., Suite 1
Windsor Heights, IA 50324

Phase II Acid Rain Permit

Issued to: Exira Station Operated by: Western Minnesota Municipal Power Agency ORIS code: 56013 Effective: Five years from date of issuance

For the Director of the Department of Natural Resources

Douglas A. Campbell 8/27/2012

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

Acid Rain Permit comprises the following:

1) **Statement of Basis.**

2) **SO_2** allowances allocated under this permit for each affected unit.

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

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

1) Statement of Basis

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

2) SO_2 Allowance Allocations for each affected unit

		2012	2013	2014	2015	2016	2017
Unit U-1	SO_2 allowances, under Table 2 of 40 CFR part 73.	0*	0*	0*	0*	0*	0*

		2012	2013	2014	2015	2016	2017
Unit U-2	SO_2 allowances, under Table 2 of 40 CFR part 73.	0*	0*	0*	0*	0*	0*

		2012	2013	2014	2015	2016	2017
Unit U-3	SO_2 allowances, under Table 2 of 40 CFR part 73.	0*	0*	0*	0*	0*	0*

* The number of allowances allocated to Phase II affected units by U.S. EPA in 40 CFR part 73 Table 2 (Revised May 12, 2005). In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

3) Comments, Notes and Justifications:

Renewal Phase II SO_2 permit.

4) Permit Application: Attached.

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain Permit Application

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

This submission is: ☐ new ☐ revised ☑ for Acid Rain permit renewal

STEP 1

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

Facility (Source) Name: Exira Station	State: IA	Plant Code: 56013

STEP 2

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

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9©(1)
U-1	Yes
U-2	Yes
U-3	Yes

Facility (Source) Name (from STEP 1): Exira Station

STEP 3

Read the standard requirements.

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name (from STEP 1): Exira Station

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

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

Excess Emissions Requirements

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

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Facility (Source) Name (from STEP 1): Exira Station

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Facility (Source) Name (from STEP 1): Exira Station

Effect on Other Authorities, Cont'd.

STEP 3, Cont'd.

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

Certification

STEP 4
Read the certification statement, sign, and date.

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

Name: Raymond J. Wahle, Director, Power Supply & Operations-MRES

Signature Raymond J. Wahle Date 9/20/10

X. Appendix 6: Clean Air Interstate Rule (CAIR) Permit

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

Clean Air Interstate Rule (CAIR) Permit

Issued to: Exira Station Operated by: Western Minnesota Municipal Power Agency ORIS code: 56013
Effective: Five years from the date of issuance.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Operating Permits Section — Date: 8/27/2012

Clean Air Interstate Rule (CAIR) Permit comprises the following:

1) **Statement of Basis.**

2) Nitrogen Oxide (NO_x) annual and ozone season allowances allocated under this permit for each affected unit. Under the CAIR program the SO_2 allowances will have different values depending on the date of reconciliation.

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

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

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with Iowa Code Chapter 455B, and Title I of the Clean Air Act, the Iowa Department of Natural Resources (IDNR), Air Quality Bureau, Operating Permit Section issues this permit pursuant to 567 Iowa Administrative Code (IAC) 34.203(455B) NO_x Annual, 34.223(455B) NO_x Ozone Season, SO_2 Annual 34.210(455B) and 567 IAC 22.100(455B) to 22.116(455B). The compliance options are approved as proposed in the attached application.

2) NO_x Annual and NO_x Ozone Season allowance allocations and SO_2 requirements for each affected unit.

		2012	2013	2014	2015	2016	2017
Unit U-1	NO_x Annual Allowances under Table 1A of 567 IAC 34.205(2)	38*	38*	38*	19*	19*	19*
	NO_x Ozone Season Allowances under Table 2A of 567 IAC 34.225(2)	16*	16*	16*	8*	8*	8*
	SO_2 allowances requirements are effective January 1, 2010	The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO_2 Annual allowance allocations identified in this permit (See 40 CFR 96.223(b)). Under the CAIR program the SO_2 allowances will have different values depending on the date of reconciliation (40 CFR 96.202).					

* The number of allowances actually held by an affected source in a unit account may differ from the number the IDNR has instructed EPA to allocate. The aforementioned condition does not necessitate a revision to the unit NO_x Annual or NO_x Ozone Season allowance allocations identified in this permit (See 40 CFR 96.123(b) for NO_x Annual and 40 CFR 96.323(b) NO_x Ozone Season).

2) NOx Annual and NOx Ozone Season allowance allocations and SO2 requirements for each affected unit. (continued)

		2012	2013	2014	2015	2016	2017
Unit U-2	NO_x Annual Allowances under Table 1A of 567 IAC 34.205(2)	38*	38*	38*	19*	19*	19*
	NO_x Ozone Season Allowances under Table 2A of 567 IAC 34.225(2)	17*	17*	17*	8*	8*	8*
	SO_2 allowances requirements are effective January 1, 2010	The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO_2 Annual allowance allocations identified in this permit (See 40 CFR 96.223(b)). Under the CAIR program the SO_2 allowances will have different values depending on the date of reconciliation (40 CFR 96.202).					

2) NOx Annual and NOx Ozone Season allowance allocations and SO2 requirements for each affected unit. (continued)

		2012	2013	2014	2015	2016	2017
Unit U-3	NO_x Annual Allowances under Table 1A of 567 IAC 34.205(2)	0*	0*	0*	0*	0*	0*
	NO_x Ozone Season Allowances under Table 2A of 567 IAC 34.225(2)	0*	0*	0*	0*	0*	0*
	SO_2 allowances requirements are effective January 1, 2010	The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO_2 Annual allowance allocations identified in this permit (See 40 CFR 96.223(b)). Under the CAIR program the SO_2 allowances will have different values depending on the date of reconciliation (40 CFR 96.202).					

3) Comments, Notes and Justifications: Combustion Turbines U-1, U-2 and U-3 are affected units under CAIR and Acid Rain affected units. These units are required to acquire allowances to cover their NO_x Annual, NO_x Ozone Season and SO_2 emissions.

4) Permit Application: Attached.

CAIR Permit Application

(for sources covered under a CAIR SIP)

For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

This submission is: ⊗ New ☐ Revised

STEP 1
Identify the source by plant name, State, and ORIS or facility code

Plant Name	State	ORIS/Facility Code
Exira Station – Western Minnesota Municipal Power Agency	Iowa	56013

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO_X Annual	SO_2	NO_X Ozone Season
U-1	X	X	X
U-2	X	X	X
U-3	X	X	X

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and such CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable).

Exira Station
Plant Name (from Step 1)

STEP 3, continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) with the CAIR NO_X emissions limitation, CAIR SO_2 emissions limitation, and CAIR NO_X Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO_X unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO_X allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.

(4) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Annual Trading Program. No provision of the CAIR NO_X Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO_X unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO_2 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO_2 unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.

(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

STEP 3, continued

(d) Excess emissions requirements.

If a CAIR NO_X source emits nitrogen oxides during any control period in excess of the CAIR NO_X emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_X unit at the source shall surrender the CAIR NO_X allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR SO_2 source emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO_X Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_X Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(f) Liability.

(1) Each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) that applies to a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) that applies to a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

Exira Station Plant Name (from Step 1)

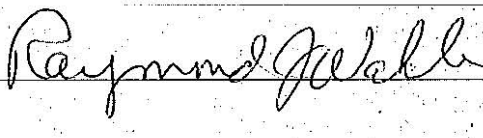
STEP 3, continued

(g) Effect on Other Authorities.

No provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) or CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Certification

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

Raymond J. Wahle Name	
Signature 	**July 9, 2007** Date